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Water Resources Data for Colorado, Water Year 1979. Volume 3. Dolores River Basin, Green River Basin, and San Juan River Basin

(U.S.) Geological Survey
Lakewood, CO

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March 3, 1849

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Water Resources Data for Colorado

Volume 3. Dolores River Basin,
Green River Basin,
and San Juan River Basin

U.S. GEOLOGICAL SURVEY WATER-DATA REPORT CO-79-3

WATER YEAR 1979

Prepared in cooperation with the State of Colorado
and with other agencies

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UNITED STATES DEPARTMENT OF THE INTERIOR
CECIL D. ANDRUS, Secretary

GEOLOGICAL SURVEY
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Water-resources data for Colorado for the 1979 water year consists of records of stage, discharge, and water quality of streams; stage, contents, and water quality of lakes and reservoirs, and water levels and water quality of wells and springs. This report (Volumes 1, 2, and 3) contains discharge records for about 460 gaging stations, stage and contents of 22 lakes and reservoirs, 4 partial-record low-flow stations, 93 crest-stage partial-record stations, and 200 miscellaneous sites; water quality for 143 gaging stations and 130 miscellaneous sites; and water levels for 55 observation wells. A few pertinent stations in bordering States are also included in this report. The records were collected and computed by the Water Resources Division of the U.S. Geological Survey under the direction of J. F. Blakey, district chief. These data represent that portion of the National Water Data System collected by the U.S. Geological Survey and cooperating State and Federal agencies in Colorado.

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PREFACE

This report was prepared by the U.S. Geological Survey in cooperation with the State of Colorado and other agencies by personnel of the Colorado District of the Water Resources Division under the supervision of J. F. Blakey, District Chief, and Alfred Clebsch, Jr., Regional Hydrologist, Central Region.

This report is one of a series issued State by State under the direction of Philip Cohen, Chief Hydrologist, and the Assistant Chief Hydrologist for Scientific Publications and Data Management.

Data for Colorado are in three volumes as follows:

Volume 1. Missouri River, Arkansas River, and Rio Grande basins in Colorado,
Volume 2. Colorado River basin in Colorado, above the Dolores River, and
Volume 3. Dolores River, Green River, and San Juan River basins in Colorado.

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Partial tables: (c) chemical, (b) biological, (m) microbiological, (s) sediment, (t) temperature]

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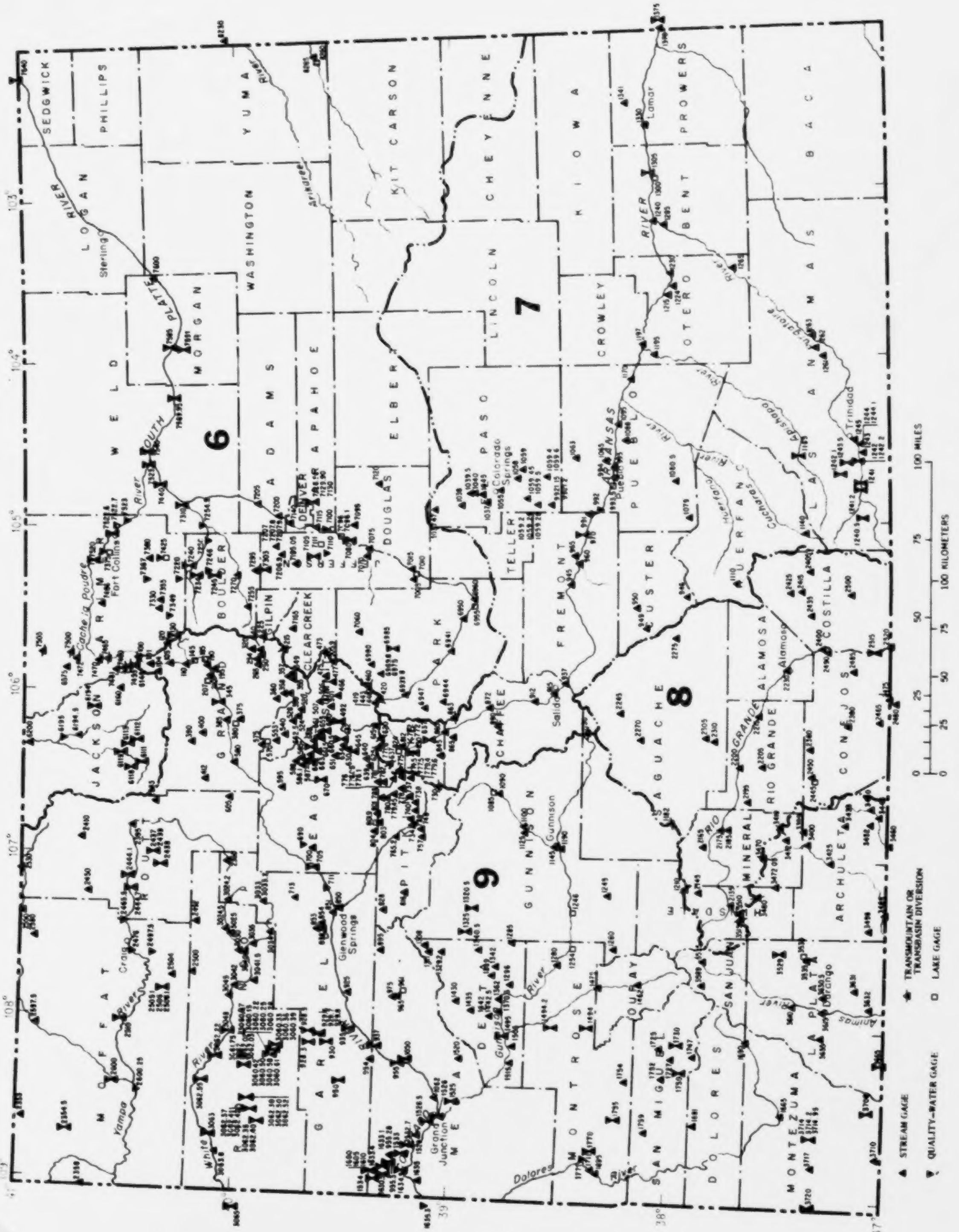
VOLUME 2: COLORADO RIVER BASIN ABOVE THE DOLORES RIVER
VOLUME 3: DOLORES, GREEN, AND SAN JUAN BASINS

INTRODUCTION

Water-resources data for the 1979 water year for Colorado consists of records of stage, discharge, and water quality of streams; stage, contents, and water quality of lakes and reservoirs; and water levels and water quality of wells and springs. This report (Volumes 1, 2, and 3) contains discharge records for about 460 streamflow-gaging stations, stage and contents of 22 lakes and reservoirs, 4 partial-record low-flow stations, 93 crest-stage partial-record stations, and 200 miscellaneous sites; water quality for 143 streamflow-gaging stations and 130 miscellaneous sites; and water levels for 55 observation wells. Locations of lake- and streamflow-gaging stations and water-quality stations are shown in figure 1, locations of crest-stage partial-record stations are shown in figure 2, and locations of observation wells are shown in figure 3. A few pertinent stations in bordering States also are included in this report. The records were collected and computed by the Colorado District. These data represent that part of the National Water Data System collected by the U.S. Geological Survey and cooperating State and Federal agencies in Colorado.

Records of discharge and stage of streams, and contents and stage of lakes and reservoirs are published in a series of U.S. Geological Survey Water-Supply Papers entitled, "Surface-water Supply of the United States." Through September 30, 1960, these water-supply papers were in an annual series and then in a 5-year series for 1961-65 and 1966-70. Records of chemical quality, water temperatures, and suspended sediment were published from 1941 to 1970 in an annual series of water-supply paperd entitled "Quality of Surface Waters of the United States." Records of ground-water levels were published from 1935 to 1955 in an annual series of water-supply papers entitled "Water Levels and Artesian Pressures in Wells in the United States," and from 1955 to the present time, in a 5-year series of water-supply papers entitled "Ground-Water Levels in the United States." Water-supply papers may be purchased from Branch of Distribution, U.S. Geological Survey, 1200 Eads Street, Arlington, VA 22202.

Beginning with the 1961 water year, streamflow records and related data have been released by the Geological Survey in annual reports on a State-boundary basis. Beginning with the 1964 water year, water-quality records for surface and ground water have been similarly released in separate annual reports. These reports provided for rapid release of preliminary data shortly after the end of the water year. The final data were then released in the series of water-supply papers mentioned above. Beginning with the 1975 water year, water data will be released on a State-boundary basis in final form and will not be republished in the water-supply paper series. The 1975 and subsequent water year reports will be in a series which will carry an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this report is identified as "U.S. Geological Survey Water-Data Report CO-78-3." These reports are for sale by the National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161. For more information on available publications, see the section entitled, "PUBLICATIONS" on subsequent pages.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OTERO
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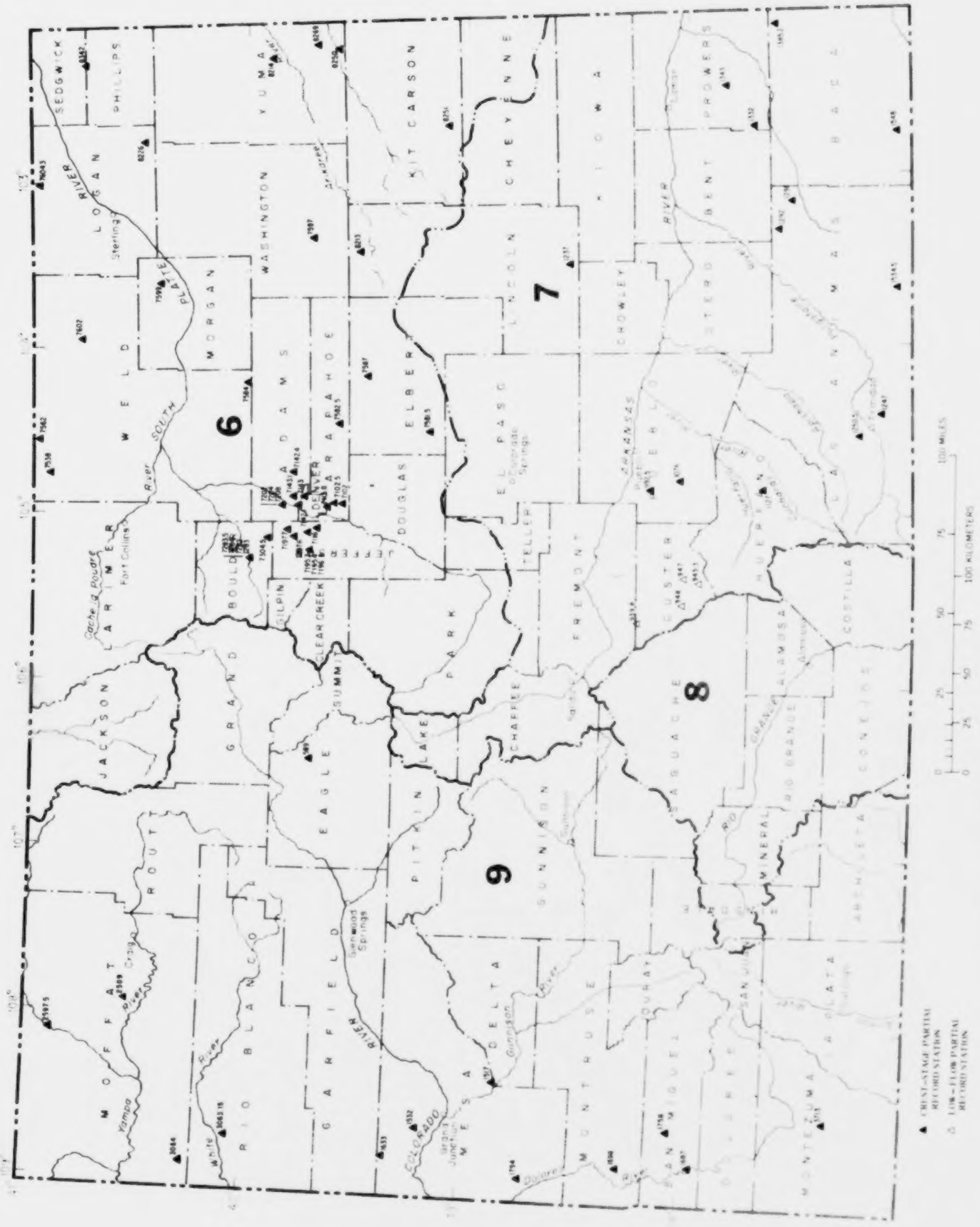
Lamar
Trinidad
Salida
Alamosa
Gunnison
Durango
Craig
Glenwood Springs
Grand Junction
SOUTH PLATTE RIVER
Cache la Poudre River
ARKANSAS RIVER
Arikaree
Republican River
RIO GRANDE
Yampa River
White River
COLORADO RIVER
Gunnison River
Dolores River
San Juan River
Animas River
Purgatoire River
Huerfano River
Cucharas River
Apishapa River
41°
40°
39°
38°
37°
108°
107°
106°
105°
104°
103°
STREAM GAGE
QUALITY-WATER GAGE
TRANSMOUNTAIN OR TRANSBASIN DIVERSION
LAKE GAGE
0 25 50 100 MILES
0 25 50 75 100 KILOMETERS

Figure 1.—Map showing locations of lake- and streamflow- gaging stations and water-quality stations in Colorado.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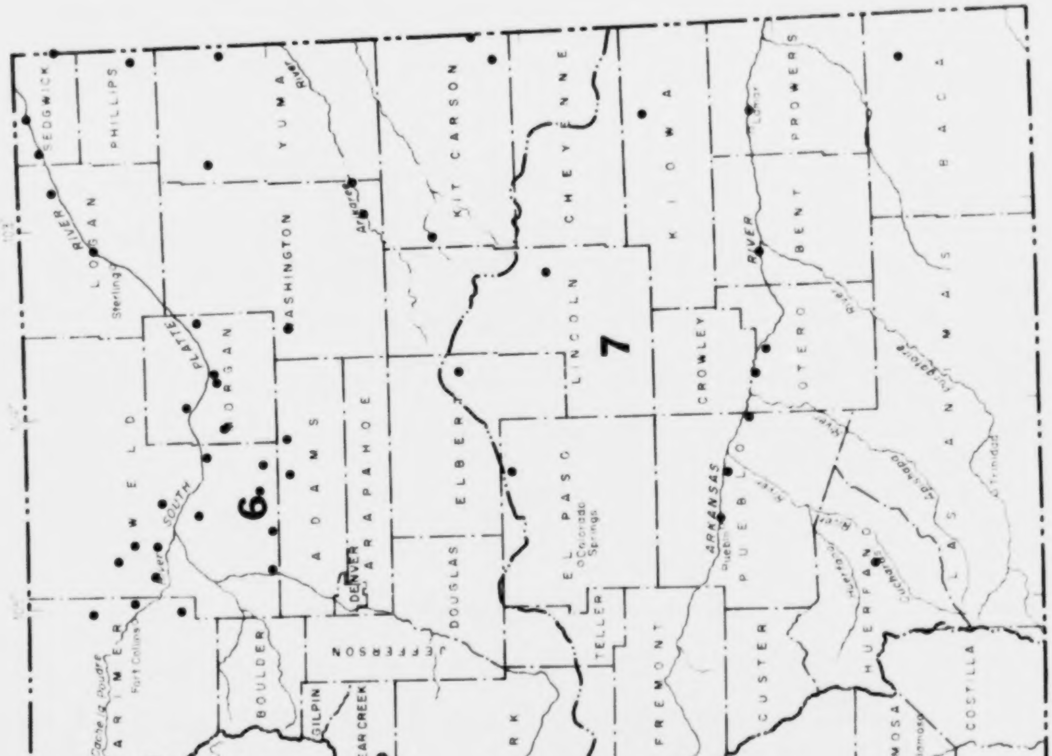
CONEJOS
RIO GRANDE
SAGUACHE
MINERAL
ARCHULETA
HINSDALE
SAN JUAN
LA PLATA
MONTEZUMA
DOLORES
SAN MIGUEL
MONTROSE
OURAY
GUNNISON
DELTA
Gunnison River
MESA
Grand Junction
COLORADO RIVER
GARFIELD
Glenwood Springs
PITKIN
LAKE
CHAFFEE
PARK
SUMMIT
EAGLE
GRAND
JACKSON
ROUTT
MOFFAT
Craig
Yampa River
RIO BLANCO
White River
6
7
8
9
▲ CREST-STAGE PARTIAL RECORD STATION
△ LOW-FLOW PARTIAL RECORD STATION
0 25 50 75 100 MILES
0 25 50 75 100 KILOMETERS

Figure 2.--Map showing locations of crest-stage partial-record stations in Colorado.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RIO GRANDE
COLORADO RIVER
Gunnison River
Dolores River
White River
Yampa River
Cache la Poudre
0 25 50 75 100 MILES
0 25 50 75 100 KILOMETERS

Figure 3.--Map showing locations of observation wells in Colorado.

COOPERATION

The U.S. Geological Survey and organizations of the State of Colorado have had cooperative agreements for the systematic collection of surface-water records since 1895, and for water-quality records since 1941. Organizations that assisted in collecting data for this report through cooperative agreement with the Survey are:

Colorado Division of Water Resources, J. A. Danielson, State Engineer.
Colorado Water Conservation Board, J. W. McDonald, Director.
Colorado Department of Highways, Jack Kinstlinger, Executive Director.
Arkansas River Compact Administration, Frank G. Cooley, Chairman and Federal Representative.
Colorado River Water Conservation District, Roland C. Fischer, Secretary-Engineer.
Metropolitan Denver Sewage Disposal District No. 1, William E. Korbitz, Manager.
Northern Colorado Water Conservation District, E. F. Phipps, Secretary-Manager.
Purgatoire River Water Conservancy District, Clyde Dawn, President.
Southwestern Water Conservation District, Robert H. Tyner, Manager.
Southeastern Colorado Water Conservancy District, C. L. Thomson, General Manager.
St. Vrain and Left Hand Water Conservancy District, James A. Cinea, Executive Director.
City and County of Denver, Board of Water Commissioners, Charles F. Brannan, President.
Eagle County Commissioners, Dale F. Grant, Chairman.
Pitkin County Board of County Commissioners, George Ochs, County Manager.
City of Aspen, Phillip Mahoney, City Manager.
City of Aurora, C. A. Wemlinger, Director of Utilities.
Colorado City Water and Sanitation District, W. T. Hambric, District Administrator.
City of Colorado Springs, Department of Public Utilities, James D. Phillips, Director.
City of Fort Collins, Roger E. Krempel, Director of Utilities.
City of Glenwood Springs, John D. West, Manager.

Financial assistance was also provided by the U.S. Army, Corps of Engineers, U.S. Army; Bureau of Indian Affairs, Bureau of Land Management, Bureau of Mines, Water and Power Resources Service, and the National Park Service, U.S. Department of the Interior; and the U.S. Environmental Protection Agency. Organizations that supplied data are acknowledged in station descriptions.

Some records have been collected and computed by contractors in accordance with U.S. Geological Survey specifications and under Geological Survey quality control.

HYDROLOGIC CONDITIONS

Water year 1979 was a year of above average runoff due to the heavy snow pack. The winter snowpack ranged from near 80 percent of normal in the Arkansas River basin to 220 percent of normal in Rio Grande basin. Streamflow varied from about 75 percent of normal in the southeast to about 260 percent of normal in the northeast part of the State.

Ground-water levels continued to decline in the northern High Plains, but remained constant in the alluvial river-channel aquifers.

DEFINITION OF TERMS

Terms related to streamflow, water quality, and other hydrologic data, as used in this report, are defined below. See also the table for converting inch-pound units to International System of units (SI) on the inside of the back cover.

Acre-foot (AC-FT, acre-ft) is the quantity of water required to cover 1 acre to a depth of 1 foot and is equivalent to 43,560 cubic feet or about 326,000 gallons or 1,233 cubic meters.

Algae are mostly aquatic single-celled, colonial, or multi-celled plants, containing chlorophyll and lacking roots, stems, and leaves.

Aquifer is a geologic formation, group of formations, or part of a formation that contains sufficient saturated permeable material to yield significant quantities of water to wells and springs.

Bacteria are microscopic unicellular organisms, typically spherical, rod like, or spiral and threadlike in shape, often clumped into colonies. Some bacteria cause disease, others perform an essential role in nature in the recycling of materials; for example, by decomposing organic matter into a form available for reuse by plants.

Total coliform bacteria are a particular group of bacteria that are used as indicators of possible sewage pollution. They are characterized as aerobic or facultative anaerobic, gram-negative, nonspore-forming, rod-shaped bacteria which ferment lactose with gas formation within 48 hours at 35°C. In the laboratory these bacteria are defined as all the organisms which produce colonies with a golden-green metallic sheen within 24 hours when incubated at 35°C ± 1.0°C on M-Endo medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Fecal coliform bacteria are bacteria that are present in the intestines or feces of warm-blooded animals. They are often used as indicators of the sanitary quality of the water. In the laboratory they are defined as all organisms which produce blue colonies within 24 hours when incubated at 44.5°C ± 0.2C° on M-FC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Fecal streptococcal bacteria are bacteria found also in the intestines of warm-blooded animals. Their presence in water is considered to verify fecal pollution. They are characterized as gram-positive, cocci bacteria which are capable of growth in brain-heart infusion broth. In the laboratory they are defined as all the organisms which produce red or pink colonies within 48 hours at 35°C ± 1.0°C on M-enterrococcus medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Bed material is the unconsolidated material of which the bottom of a streambed, lake, pond, reservoir, or estuary is composed.

Biochemical oxygen demand (BOD) is a measure of the quantity of dissolved oxygen, in milligrams per liter (mg/L), necessary for the decomposition of organic matter by microorganisms, such as bacteria.

Biomass is the amount of living matter present at any given time, expressed as the mass per unit area of volume of habitat.

Ash mass is the mass of amount of residue present after the residue from the dry mass determination has been ashed in a muffle furnace at a temperature of 500°C for 1 hour. The ash mass values of zooplankton and phytoplankton are expressed in grams per cubic meter (g/m^3), and those for periphyton and benthic organisms in grams per square meter (g/m^2).

Dry mass refers to the mass of residue present after drying in an oven at 60°C for zooplankton and 105°C for periphyton, until the mass remains unchanged. This mass represents the total organic matter, ash and sediment, in the sample. Dry mass values are expressed in the same units as ash mass.

Organic mass or volatile mass of the living substance is the difference between the dry mass and the ash mass, and represents the actual mass of the living matter. The organic mass is expressed in the same units as for ash mass and dry mass.

Wet mass is the mass of living matter plus contained water.

Bottom material: See Bed material.

Cells/volume refers to the number of cells of any organism which is counted by using a microscope and grid or counting cell. Many planktonic organisms are multicelled and are counted according to the number of contained cells per sample, usually milliliters (mL) or liters (L).

Cfs-day is the volume of water represented by flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, approximately 1.9835 acre-feet, about 646,000 gallons or 2,447 cubic meters. It represents a runoff of approximately 0.0372 inch from 1 square mile, or 0.3468 millimeter from 1 square kilometer.

Chemical oxygen demand (COD) is a measure of the chemically oxidizable material in the water, and furnishes an approximation of the amount of organic and reducing material present. The determined value may correlate with natural water color or with carbonaceous organic pollution from sewage or industrial wastes.

Chlorophyll refers to the green pigments of plants. Chlorophyll a and b are the two most common pigments in plants.

Contents is the volume of water in a reservoir or lake. Unless otherwise indicated, volume is computed on the basis of a level pool and does not include bank storage.

Control designates a feature downstream from the gage that determines the stage-discharge relation at the gage. This feature may be a natural constriction of the channel, an artificial structure, or a uniform cross section over a long reach of the channel.

Cubic foot per second (cfs, ft^3/s) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second and is equivalent to approximately 7.48 gallons per second, or 448.8 gallons per minute, or 0.02832 cubic meters per second.

Discharge is the volume of water (or more broadly, volume of fluid plus suspended sediment), that passes a given point within a given period of time.

Mean discharge (MEAN) is the arithmetic mean of individual daily mean discharges during a specific period.

Instantaneous discharge is the discharge at a particular instant of time.

Dissolved refers to that material in a representative water sample which passes through a 0.45 µm membrane filter. This may include some very small (colloidal) suspended particles as well as the amount of substance present in true chemical solution. It is a convenient operational definition used by Federal agencies that collect water data. Determinations of "dissolved" constituents are made on subsamples of the filtrate.

Dissolved oxygen (DO) is the dissolved-oxygen content of water in equilibrium with air and is a function of atmospheric pressure and temperature and dissolved-solids concentration of the water. The capacity of water for dissolved-oxygen decreases as dissolved solids or temperature increase or as atmospheric pressure decreases. Dissolved-solids concentration has the least effect on dissolved-oxygen concentration. Photosynthesis and respiration may cause diel variations in dissolved-oxygen concentration in water from some streams.

Drainage area of a stream at a specific location is that area, measured in a horizontal plane, enclosed by a topographic divide from which direct surface runoff from precipitation normally drains by gravity into the stream above the specified point. Figures of drainage area given herein include all closed basins, or noncontributing areas, within the area unless otherwise noted.

Gage height (G.H.) is the water-surface elevation referred to some arbitrary gage datum. Gage height is often used interchangeably with the more general term "stage," although gage height is more appropriate when used with a reading on a gage.

Gaging station is a particular site on a stream, canal, lake, or reservoir where systematic observations of hydrologic data are obtained. When used in connection with a discharge record, the term is applied only to those gaging stations where a continuous record of discharge is computed.

Hardness of water is the physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is attributable to the presence of alkaline earths (principally calcium and magnesium) and is expressed as equivalent calcium carbonate ($CaCO_3$).

Micrograms per liter (UG/L, µg/L) is a unit expressing the concentration of chemical constituents in solution as mass (micrograms) of solute per unit volume (liter) of water. One thousand micrograms per liter is equivalent to one milligram per liter.

Milligrams per liter (MG/L, mg/L) is a unit for expressing the concentration of chemical constituents in solution. Milligrams per liter represent the mass of solute per unit volume (liter) of water. Concentration of suspended sediment also is expressed in mg/L, and is based on the mass of sediment per liter of water-sediment mixture.

Table 1.--Factors for conversion of chemical constituents in milligrams or micrograms per liter to milliequivalents per liter

Ion	Multiply by	Ion	Multiply by
Aluminum (Al^{+3})*......	0.11119	Iodide (I^{-1})..........	0.00788
Ammonia as N..........	.07139	Iron (Fe^{+3})*..........	.05372
Barium (Ba^{+2}).........	.01456	Lead (Pb^{+2})*..........	.00965
Bicarbonate (HCO_3^{-1})..	.01639	Lithium (Li^{+1})*.......	.14411
Bromide (Br^{-1})........	.01251	Magnesium (Mg^{+2})......	.08226
Calcium (Ca^{+2})........	.04990	Manganese (Mn^{+2})*.....	.03640
Carbonate (CO_3^{-2}).....	.03333	Nickel (Ni^{+2})*........	.03406
Chloride (Cl^{-1}).......	.02821	Nitrate as N..........	.07139
Chromium (Cr^{+6})*......	.11539	Nitrite as N..........	.07139
Cobalt (Co^{+2})*........	.03394	Phosphate,ortho as P..	.09686
Copper (Cu^{+2})*........	.03148	Potassium (K^{+1}).......	.02557
Cyanide (CN^{-1})........	.03844	Sodium (Na^{+1}).........	.04350
Fluoride (F^{-1})........	.05264	Strontium (Sr^{+2})*.....	.02283
Hydrogen (H^{+1})........	.99209	Sulfate (SO_4^{-2}).......	.02082
Hydroxide (OH^{-1})......	.05880	Zinc (ZN^{+2})*..........	.03060

*Constituents reported in micrograms per liter; multiply by factor and divide results by 1,000.

National Geodetic Vertical Datum of 1929 (NGVD) is a geodetic datum derived from a general adjustment of the first order level nets of both the United States and Canada. It was formerly called "Sea Level Datum of 1929" or "mean sea level" in this series of reports. Although the datum was derived from the average sea level over a period of many years at 26 tide stations along the Atlantic, Gulf of Mexico, and Pacific Coasts, it does not necessarily represent local mean sea level at any particular place.

Partial-record station is a particular site where limited streamflow or water-quality data are collected systematically over a period of years for use in hydrologic analyses.

Particle size is the diameter, in millimeters (mm), of suspended sediment or bed material determined either by sieve or sedimentation methods. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulation tube) determine fall diameter of particles in either distilled water (chemically dispersed) or in native water (the river water at the time and point of sampling).

Table 2.--Factors for conversion of sediment concentration in milligrams per liter to parts per million*

[All values calculated to three significant figures]

Range of concentration in 1000 mg/L	Divide by	Range of concentration in 1000 mg/L	Divide by	Range of concentration in 1000 mg/L	Divide by	Range of concentration in 1000 mg/L	Divide by
0 - 8	1.00	201-217	1.13	411-424	1.26	619-634	1.39
8.05- 24	1.01	218-232	1.14	427-440	1.27	636-650	1.40
24.2 - 40	1.02	234-248	1.15	443-457	1.28	652-666	1.41
40.5 - 56	1.03	250-264	1.16	460-473	1.29	668-682	1.42
56.5 - 72	1.04	266-280	1.17	476-489	1.30	684-698	1.43
72.5 - 88	1.05	282-297	1.18	492-506	1.31	700-715	1.44
88.5 -104	1.06	299-313	1.19	508-522	1.32	717-730	1.45
105 -120	1.07	315-329	1.20	524-538	1.33	732-747	1.46
121 -136	1.08	331-345	1.21	540-554	1.34	749-762	1.47
137 -152	1.09	347-361	1.22	556-570	1.35	765-780	1.48
153 -169	1.10	363-378	1.23	572-585	1.36	782-796	1.49
170 -185	1.11	380-393	1.24	587-602	1.37	798-810	1.50
186 -200	1.12	395-409	1.25	604-617	1.38		

*Based on water density of 1.000 g/mL and a specific gravity of sediment of 2.65.

Particle-size classification used in this report agrees with recommendations made by the American Geophysical Union Subcommittee on Sediment Terminology. The classification is as follows:

Classification	Size (mm)	Method of analysis
Clay............	0.00024 - 0.004	Sedimentation
Silt............	.004 - .062	Sedimentation
Sand............	.062 - 2.0	Sedimentation or sieve
Gravel..........	2.0 - 64.0	Sieve

The particle-size distributions given in this report are not necessarily representative of all particles in transport in the stream. Most of the organic material is removed and the sample is subjected to mechanical and chemical dispersion before analysis in distilled water. Chemical dispersion is not used for native-water analysis.

Periphyton is the assemblage of microorganisms attached to, and growing upon, solid surfaces. While primarily consisting of algae, they also include bacteria, fungi, protozoa, rotifers, and other small organisms. Periphyton is a useful indicator of water quality.

Pesticide network is a network of regularly sampled water-quality stations where samples are collected to determine the concentration and distribution of pesticides in streams whose waters are used for irrigation or in streams in areas where potential contamination could result from the application of the commonly used insecticides and herbicides.

Pesticides are chemical compounds used to control undesirable plants and animals. Major categories of pesticides include insecticides, miticides, fungicides, herbicides, and rodenticides. Insecticides and herbicides, which control insects and plants respectively, are the two categories reported.

Phytoplankton is the plant part of the plankton. They are usually microscopic and their movement is subject to the water currents. Phytoplankton growth is dependent upon solar radiation and nutrient substances. Because they are able to incorporate as well as release materials to the surrounding water, the phytoplankton have a profound effect upon the quality of the water. They are the primary food producers in the aquatic environment, and are commonly known as algae.

Blue-green algae are a group of phytoplankton organisms having a blue pigment, in addition to the green pigment called chlorophyll. Blue-green algae often cause nuisance conditions in water.

Diatoms are the unicellular or colonial algae having a siliceous shell. Their concentrations are expressed as number of cells per mL of sample.

Green algae have chlorophyll pigments similar in color to those of higher green plants. Some forms produce algal mats or floating "moss" in lakes. Their concentrations are expressed as number of cells per mL of sample.

Picocurie (PC, pCi) is one trillionth (1×10^{-12}) of the amount of radioactivity represented by a curie (Ci). A curie is the amount of radioactivity that yields 3.7×10^{10} radioactive disintegrations per second. A picocurie yields 2.22 disintegrations per minute (dpm).

Polychlorinated biphenyls (PCBs) are industrial chemicals that are mixtures of chlorinated biphenyl compounds having various percentages of chlorine. They are similar in structure to organochlorine insecticides.

Radiochemical network is a network of regularly sampled water-quality stations where samples are collected monthly or twice a year (at high and low flow) to be analyzed for radioisotopes. The streams that are sampled represent major drainage basins in the conterminous United States.

Radioisotopes are isotopic forms of an element that exhibit radioactivity. Isotopes are varieties of a chemical element that differ in atomic weight, but are very nearly alike in chemical properties. The difference arises because the atoms of the isotopic forms of an element differ in the number of neutrons in the nucleus. For example: Ordinary chlorine is a mixture of isotopes having atomic weights 35 and 37, with the natural mixture having atomic weight about 35.453. Many of the elements similarly exist as mixtures of isotopes, and a great many new isotopes have been produced in the operation of nuclear devices such as the cyclotron (Rose and Rose, 1966). There are 275 isotopes of the 81 stable elements in addition to over 800 radioactive isotopes.

Radioisotopes that are determined in this program are natural uranium in µg/L (micrograms per liter), radium as radium-226 in PC/L (pCi/L, picocuries per liter), gross beta radiation as equivalent strontium/yttrium-90 or cesium-137 in PC/L, and gross alpha radiation as micrograms of uranium equivalent per liter (µg/L). Gross alpha and beta radioactivity associated with the fine-grained (silt and clay-sized) sediments in the samples are also determined.

Recoverable from bottom material the amount of a given constituent that is in solution after a representative sample of bottom material has been digested by a method (usually using an acid or mixture of acids) that results in dissolution of only readily soluble substances. Complete dissolution of all bottom material is not achieved by the digestion treatment and thus the determination represents less than the total amount (that is, less than 95 percent) of the constituent in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Sediment is solid material that originates mostly from disintegrated rocks and is transported by, suspended in, or deposited from water; it includes chemical and biochemical precipitates and decomposed organic material, such as humus. The quantity, characteristics, and cause of the occurrence of sediment in streams are influenced by environmental factors. Some major factors are degree of slope, length of slope, soil characteristics, land usage, and quantity and intensity of precipitation.

> Suspended sediment is the sediment that at any given time is maintained in suspension by the upward components of turbulent currents or that exists in suspension as a colloid.

Suspended-sediment concentration is the velocity-weighted concentration of suspended sediment in the sampled zone (from the water surface to a point approximately 0.3 ft (0.09 m) above the bed) expressed as milligrams of dry sediments per liter of water-sediment mixture (mg/L).

Suspended-sediment discharge (tons/day) is the rate at which dry weight of sediment passes a section of a stream or is the quantity of sediment, as measured by dry weight or volume, that passes a section in a given time. It is computed by multiplying discharge in cfs times concentration in mg/L times 0.0027.

Suspended-sediment load is that quantity of suspended sediment passing a section in a specified period.

Total sediment discharge or total sediment load is the sum of the suspended-sediment discharge and the bedload discharge. It is the total quantity of sediment, as measured by dry weight or volume, that passes a section during a given time.

Mean concentration is the time-weighted concentration of suspended sediment passing a stream section during a 24-hour day.

Sodium adsorption ratio (SAR) is the expression of relative activity of sodium ions in exchange reactions with soil and is an index of sodium or alkali hazard to the soil. This ratio should be known especially for water used for irrigating farmland.

Solute is any substance derived from the atmosphere, vegetation, soil, or rocks and is dissolved in water.

Specific conductance is a measure of the ability of a water to conduct an electrical current. It is expressed in micromhos per centimeter at 25°C. Specific conductance is related to the number and specific chemical types of ions in solution and can be used for approximating the dissolved-solids content in the water. Commonly, the concentration of dissolved solids (in milligrams per liter) is about 65 percent of the specific conductance (in micromhos). This relation is not constant from stream to stream or from well to well, and it may vary in the same source with changes in the composition of the water.

Stage-discharge relation is the relation between gage height (stage) and volume of water per unit of time, flowing in a channel.

Streamflow is the discharge that occurs in a natural channel. Although the term "discharge" can be applied to the flow of a canal, the word "streamflow" uniquely describes the discharge in a surface stream course. The term "streamflow" is more general than "runoff" as streamflow may be applied to discharge whether or not it is affected by diversion or regulation.

Suspended, recoverable the amount of a given constituent that is in solution after the part of a representative water-suspended sediment sample that is retained on a 0.45 µm membrane filter has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all the particulate matter is not achieved by the digestion treatment and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Determinations of "suspended, recoverable" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total recoverable concentrations of the constituent.

Suspended, total the total amount of a given constituent in the part of a representative water-suspended sediment sample that is retained on a 0.45 µm membrane filter. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to determine when the results should be reported as "suspended, total."

Determinations of "suspended, total" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total concentrations of the constituent.

Thermograph is a thermometer that continuously and automatically records, on a chart, the water temperature of a stream. "Temperature recorder" is the term used to indicate the location of the thermograph.

Time-weighted average is computed by multiplying the number of days in the sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the total number of days. A time-weighted average represents the composition of water that would be contained in a vessel or reservoir that had received equal quantities of water from the stream each day for the water year.

Tons per acre-foot indicates the dry mass of dissolved solids in 1 acre-foot of water. It is computed by multiplying the concentration in milligrams per liter by 0.00136.

Tons per day is the quantity of a substance in solution or suspension that passes a stream section during a 24-hour period.

Total the total amount of a given constituent in a representative water-suspended sediment sample, regardless of the constituent's physical or chemical form. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent present in both the dissolved and suspended phases of the sample. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total." (note that the word "total" does double duty here, indicating both that the sample consists of a water-suspended sediment mixture and that the analytical method determines all of the constituent in the sample.)

> Total in bottom material the total amount of a given constituent in a representative sample of bottom material. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total in bottom material."

> Total, recoverable the amount of a given constituent that is in solution after a representative water-suspended sediment sample has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all particulate matter is not achieved by the digestion treatment, and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the dissolved and suspended phases of the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Water year in Geological Survey is the 12-month period, October 1 through September 30. The water year is designated by the calendar year in which it ends and which includes 9 of the 12 months. Thus, the year ending September 30, 1979, is called the "1979 water year."

Weighted average is used in this report to indicate the discharge-weighted average. It is computed by multiplying the discharge for a sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the sum of the discharges. A discharge-weighted average approximates the composition of water that would be found in a reservoir containing all the water passing a given location during the water year after thorough mixing in the reservoir.

WDR is an abbreviation for "Water-Data Report" in the summary REVISIONS paragraph to refer to State annual basic-data reports published after 1974.

WRD is used as an abbreviation for "Water-Resources Data" in the summary REVISIONS paragraph to refer to State annual basic-data reports.

WSP is used as an abbreviation for "Water-Supply Paper" in reference to previously published reports.

Zooplankton is the animal part of the plankton. Zooplankton are capable of extensive movements within the water column, and are often large enough to be seen with the unaided eye. Zooplankton are secondary consumers feeding upon bacteria, phytoplankton, and detritus. Because they are the grazers in the aquatic environment, the zooplankton are a vital part of the aquatic food web. The zooplankton community is dominated by small crustaceans and rotifers.

DOWNSTREAM ORDER AND STATION NUMBER

Stations are listed in a downstream direction along the main stream, and stations on tributaries are listed between stations on the main stream in the order in which those tributaries enter the main stream. Stations on tributaries entering above all mainstream stations are listed before the first mainstream station. Stations on tributaries to tributaries are listed in a similar manner. In the list of gaging stations in the front of this report the rank of tributaries is indicated by indention, each indention representing one rank.

As an added means of identification, each gaging station and each partial-record station has been assigned a station number. These are in the same downstream order used in this report. In assigning station numbers, no distinction is made between partial-record stations and continuous-record gaging stations; therefore, the station number for a partial-record station indicates downstream order position in a list made up of both types of stations. Water-quality stations located at or near gaging stations or partial-record stations have the same number as the gaging or partial-record station.

Gaps are left in the sequential allocation of numbers to allow for new stations that may be established; hence the numbers are not consecutive. The complete 8-digit number for each station, such as 07083000, which appears just to the left of the station name, includes the 2-digit part number "07" plus the 6-digit downstream order number "083000." In this report the records are listed in downstream order by parts. The part number refers to an area whose boundaries coincide with certain natural drainage lines. Records in this report are for Part 6 (Missouri River basin), Part 7 (Lower Mississippi River basin), and Part 8 (Western Gulf of Mexico basins). Records for Part 9 (Colorado River Basin) are in Volumes 2 and 3. All records for a drainage basin encompassing more than one State can be arranged in downstream order by assembling pages from the various State reports by station number to include all records in the basin.

SPECIAL NETWORKS AND PROGRAMS

Some of the stations for which data are published in this report are included in special networks and programs. These stations are identified by their title, set in parentheses, under the station name.

Hydrologic bench-mark station is one that provides hydrologic data for a basin in which the hydrologic regimen will likely be governed solely by natural conditions. Data collected at a bench-mark station may be used to separate effects of natural from manmade changes in other basins which have been developed and in which the physiography, climate, and geology are similar to those in the undeveloped bench-mark basin.

Irrigation-network stations are water-quality stations located at or near certain streamflow gaging stations west of the main stem of the Mississippi River. Data collected at these stations are used to evaluate the chemical quality of surface waters used for irrigation and the changes resulting from the drainage of irrigated lands. Prior to water year 1966, the data for these stations were published in the annual Water-Supply Paper series, "Quality of Surface Water for Irrigation, Western States."

National stream-quality accounting network (NASQAN) is a data collection network designed by the U.S. Geological Survey to meet many of the information demands of agencies or groups involved in national or regional water-quality planning and management. Both accounting and broad-scale monitoring objectives have been incorporated in the network design. Areal configuration of the network is based on river-basin accounting units (identified by 8-digit hydrologic-unit numbers) designated by the Office of Water Data Coordination in consultation with the Water Resources Council. Primary objectives of the network are: (1) To depict areal variability of streamflow and water-quality conditions nationwide on a year-by-year basis, and (2) to detect and assess long-term changes in streamflow and stream quality.

EXPLANATION OF STAGE AND WATER-DISCHARGE RECORDS

Collection and Computation of Data

The base data collected at gaging stations consist of records of stage and measurements of discharge of streams or canals, and stage, surface area, and contents of lakes or reservoirs. In addition, observations of factors affecting the stage-discharge relation or the stage-capacity relation, weather records, and other information are used to supplement base data in determining the daily flow or volume of water in storage. Records of stage are obtained from direct readings on a nonrecording gage or from a water-stage recorder that gives either a continuous graph of the fluctuations or a tape punched at 5-, 15-, 30- or 60-minute intervals. Measurements of discharge are made with a current meter, using the general methods adopted by the Geological Survey on the basis of experience in stream gaging since 1888. These methods are described in standard textbooks, in Water-Supply Paper 888, and in U.S. Geological Survey Techniques of Water Resources Investigations, book 3, chapter A6. Surface areas of lakes or reservoirs are determined from instrument surveys using standard methods. The configuration of the reservoir bottom is determined by sounding at many points.

For stream-gaging stations, rating tables giving the discharge for any stage are prepared from stage-discharge relation curves. If extensions to the rating curves are necessary to express discharge greater than measured, they are made on the basis of indirect measurements of peak discharge (such as slope-area or contracted-opening measurements, computation of flow over dams or weirs), step-backwater techniques, velocity-area studies, and logarithmic plotting. The daily mean discharge is computed from gage heights and rating tables, then the monthly and yearly mean discharge are computed from the daily figures. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily mean discharge is computed by the shifting-control method, in which correction factors based on individual discharge measurements and notes by hydrologists and observers are used in applying the gage heights to the rating tables. If the stage-discharge relation for a station is temporarily changed by the presence of aquatic growth or debris on the control, the daily mean discharge is computed by what is basically the shifting-control method.

At some stream-gaging stations the stage-discharge relation is affected by ice in the winter, and it becomes impossible to compute the discharge in the usual manner. Discharge for periods of ice effect is computed on the basis of the gage-height record and winter discharge measurements, consideration being given to the available information on temperature and precipitation, notes by gage observers and hydrologists, and comparable records of discharge for other stations in the same or nearby basins.

For a lake or reservoir station, capacity tables giving the contents for any stage are prepared from stage-area relation curves defined by surveys. The application of the stage to the capacity table gives the contents, from which the daily, monthly, or yearly change in contents is computed.

If the stage-capacity curve is subject to changes because of deposition of sediment in the reservoir, periodic resurveys of the reservoir are necessary to define new stage-capacity curves. During the period between reservoir surveys the computed contents may be increasingly in error due to the gradual accumulation of sediment.

For some gaging stations there are periods when no gage-height record is obtained or the recorded gage height is so faulty that it cannot be used to compute daily discharge or contents. This happens when the recorder stops or otherwise fails to operate properly, intakes are plugged, the float is frozen in the well, or for various other reasons. For such periods the daily discharges are estimated on the basis of recorded range in stage, adjoining good record, discharge measurements, weather records, and comparison with other station records from the same or nearby basins. Likewise, daily contents may be estimated on the basis of operator's log, adjoining good record, inflow-outflow studies, and other information.

The data in this report generally comprise a description of the station and tabulations of daily and monthly figures. For gaging stations on streams or canals a table showing the daily discharge and monthly and yearly discharge is given. For gaging stations on lakes and reservoirs a monthly summary table of stage and contents or a table showing the daily contents is given. Records are published for the water year, which begins on October 1 and ends on September 30. A calendar for the current water year is shown on the inside of the front cover to facilitate finding the day of the week for any date.

The description of the gaging station gives the location, drainage area, period of record, notations of revisions of previously published records, type and history of gages, general remarks, average discharge, and extremes of discharge or contents. The location of the gaging station and the drainage area are obtained from the most accurate maps available. Periods for which there are published records for the present station or for stations generally equivalent to the present one are given under "PERIOD OF RECORD."

Previously published streamflow records of some stations have been found to be in error on the basis of data or information later obtained. Revisions of such records are usually published along with the current records in one of the annual or compilation reports. In order to make it easier to find such revised records, a paragraph headed "REVISED RECORDS" has been added to the description of all stations for which revised records have been published. Listed therein are all the reports in which revisions have been published, each followed by the water years for which figures are revised in that report. In listing the water years only one number is given; for instance, 1933 stands for the water year October 1, 1932, to September 30, 1933. If no daily, monthly, or annual figures of discharge are affected by the revisions, the fact is brought out by notations after the year dates as follows: "(M)" means that only the instantaneous maximum discharge was revised; "(m)" that only the instantaneous minimum was revised; and "(P)" that only peak discharges were revised. If the drainage area has been revised, the report in which the revised figure was first published is given.

The type of gage currently in use, the datum of the present gage above mean sea level, referred to National Geodetic Vertical Datum; and a condensed history of the types, locations, and datums of previous gages used during the period of record are given under "GAGE." In references to datum of gage, the phrase "mean sea level" denotes "Sea Level Datum of 1929" as used by the Topographic Division of the Geological Survey unless otherwise qualified. National Geodetic Vertical Datum is explained in "DEFINITION OF TERMS."

Information pertaining to the accuracy of the discharge records, to conditions which affect the natural flow of the gaging station, availability of water-quality records, and reservoir stations information on the dam forming the reservoir, the capacity, outlet works and spillway, and purpose and use of the reservoir, is given under "REMARKS."

The average discharge for the number of years indicated is given under "AVERAGE DISCHARGE;" it is not given for stations having fewer than 5 complete years of record or for stations where changes in water development during the period of record cause the figure to have little significance.

The maximum discharge (or contents) and the maximum gage height, the minimum discharge if there is little or no regulation (or minimum contents), and the minimum gage height, if it is significant, are given under "EXTREMES." The minimum daily discharge is given if there is extensive regulation (also the minimum discharge and gage height if they are abnormally low). Under "EXTREMES" are given first, the extremes for the period of record, second, information available outside the period of record, and last, those for the current year. Unless otherwise qualified, the maximum discharge (or contents) is the instantaneous maximum corresponding to the crest stage obtained by use of a water-stage recorder (graphic or digital), a crest-stage gage, or a nonrecording gage read at the time of the crest. If the maximum gage height did not occur on the same day as the maximum discharge (or contents), it is given separately. Similarly, the minimum is the instantaneous minimum unless otherwise qualified. For some stations peak discharges are listed with EXTREMES FOR THE CURRENT YEAR; if they are, all independent peaks, including the maximum for the year, above the selected base with the time of occurrence and corresponding gage heights are published in tabular format. The base discharge, which is given in the table heading, is selected so that an average of about three peaks a year will be presented. Peak discharges are not published for any canals, ditches, drains, or for any stream for which the peaks are subject to substantial control by man. Time of day is expressed in 24-hour local standard time; for example, 12:30 a.m. is 0030, 1:30 p.m. is 1330. The minimums for these stations are published in a separate paragraph following the table of peaks.

The daily table for stream-gaging stations gives the mean discharge for each day and is followed by monthly and yearly summaries. In the monthly summary below the daily table, the line headed "TOTAL" gives the sum of the daily figures. The line headed "MEAN" gives the average flow in cubic feet per second (ft^3/s) during the month. The lines headed "MAX" and "MIN" give the maximum and minimum daily discharges, respectively, for the month.

Discharge for the month also may be expressed in acre-feet (line headed "AC-FT"). In the yearly summary below the monthly summary, the figures shown are the appropriate daily discharges for the calendar and water years.

Footnotes to the table of daily discharge are introduced by the word "NOTE." Footnotes are used to indicate periods for which the discharge is computed or estimated by special methods because of no gage-height record, backwater from various sources, or other unusual conditions. Periods of no gage-height record are indicated if the period is continuous for a month or more or includes the maximum discharge for the year. Periods of backwater from an unusual source, of indefinite stage-discharge relation, or of any other unusual condition at the gage site are indicated only if they are a month or more in length and the accuracy of the records is affected. Days on which the stage-discharge relation is affected by ice are not indicated. The methods used in computing discharge for various unusual conditions have been explained in preceding paragraphs.

For most gaging stations on lakes and reservoirs the data presented comprise a description of the station and a monthly summary table of stage and contents. For some reservoirs a table showing daily contents or stage is given. A skeleton table of capacity at given stages is published for all reservoirs for which records are published on a daily basis, but is not published for reservoirs for which only monthly data are given.

Data collected at partial-record stations and at miscellaneous sites follow the information for continuous record sites. Data for partial-record discharge stations are presented in three tables. The first is a table of discharge measurements at low-flow partial-record stations, the second is a table of annual maximum stage and discharge at crest-stage stations, and the third is a table of discharge measurements at miscellaneous sites.

Accuracy of field data and computed results

The accuracy of streamflow data depends primarily on (1) the stability of the stage-discharge relation or, if the control is unstable, the frequency of discharge measurements, and (2) the accuracy of observations of stage, measurements of discharge, and interpretations of records.

The station description under "REMARKS" states the degree of accuracy of the records. "Excellent" means that about 95 percent of the daily discharges are within 5 percent; "good" means within 10 percent; and "fair" within 15 percent. "Poor" means that daily discharges have less than "fair" accuracy.

Figures of daily mean discharge in this report are shown to the nearest hundredth of a cubic foot per second (ft^3/s) for discharges of less than 1 ft^3/s; to tenths between 1.0 and 10 ft^3/s; to whole numbers between 10 and 1,000 ft^3/s; and to 3 significant figures above 1,000 ft^3/s. The number of significant figures used is based solely on the magnitude of the figure. The same rounding rules apply to discharge figures listed for partial-record stations and miscellaneous sites.

Discharge at many stations, as indicated by the monthly mean, may not reflect natural runoff due to the effects of diversion, consumption, regulation by storage, increase or decrease in evaporation due to artificial causes, or to other factors. However, because all the effects cannot be measured or evaluated, satisfactory adjustments generally cannot be made. For some stations, available figures of diversions or change in contents of reservoirs are included as supplemental data. Even at those stations where adjustments can be made, large errors in computed runoff may occur if adjustments or losses are large in comparison with the observed discharge.

Other Data Available

Information of a more detailed nature than that published for most of the gaging stations, such as observations of water temperatures, discharge measurements, gage-height records, and rating tables is on file in the district office. Also most gaging-station records are available in computer-usable form and many statistical analyses have been made.

Information on the availability of unpublished data or statistical analyses may be obtained from the district office.

Records of Discharge Collected by Agencies other than the Geological Survey

Records of discharge not published by the Geological Survey were collected at many sites in Colorado during the water year by the following agencies: City of Colorado Springs; Colorado Division of Water Resources; Forest Service, U.S. Department of Agriculture; City and County of Denver, Board of Water Commissioners; National Weather Service, Department of Commerce; and Water and Power Resources Service, U.S. Department of the Interior.

EXPLANATION OF WATER-QUALITY RECORDS

Collection and Examination of Data

Water samples for analyses usually are collected at or near streamflow-gaging stations. The quality-of-water records are given immediately following the discharge records at these stations.

The descriptive heading for water-quality records gives the period of record for all water-quality data, the period of daily record for parameters that are measured on a daily basis (such as, specific conductance, pH, dissolved oxygen, water temperature, sediment discharge), extremes for the period of daily record, extremes for current year, and general remarks.

For ground-water records, no descriptive statements are given; however, the well number, depth of well, date of sampling, or other pertinent data are given in the table containing the chemical analyses of the ground water.

Water Analysis

Most methods for collecting and analyzing water samples are described in "U.S. Geological Survey Techniques of Water-Resources Investigations," which are listed on page 35.

One sample can define adequately the water quality at a given time if the mixture of solutes throughout the stream cross section is homogeneous. However, the concentration of solutes at different locations in the cross section may vary widely with different rates of water discharge, depending on the source of material and the turbulence and mixing of the stream. Some streams must be sampled through several vertical sections to obtain a representative sample needed for an accurate mean concentration and for use in calculating load.

Chemical-quality data are considered to be the most representative values available for the stations listed. The values reported represent water-quality conditions at the time of sampling, as much as possible, consistent wth available sampling techniques and methods of analysis. In the rare case where an apparent inconsistency exists between a reported pH value and the relative abundance of carbon dioxide species (carbonate and bicarbonate), the inconsistency is the result of a slight uptake of carbon dioxide from the air by the sample between measurement of pH in the field determination of carbonate and bicarbonate in the laboratory.

Prior to the 1968 water year, data for chemical constituents and concentrations of suspended sediment were reported in parts per million (ppm) and water temperatures were reported in degrees Fahrenheit (°F). In October 1967, the Geological Survey began reporting data for chemical constituents and concentrations of suspended sediment in milligrams per liter (mg/L) and water temperatures in degrees Celsius (°C). In waters with a density of 1.000 grams per milliliter (g/mL), parts per million and milligrams per liter can be considered equal. In waters with a density greater than 1.000 g/mL, values in parts per million should be multiplied by the density to convert to milligrams per liter. Temperature reported in degrees Celsius may be converted to degrees Fahrenheit by using table 3.

For chemical-quality stations equipped with digital monitors, the records consist of daily maximum, minimum, and mean values for each constituent measured and are based upon hourly punches beginning at 0100 hours and ending at 2400 hours for the day of record. More detailed records (hourly values) may be obtained from the district office.

Water Temperatures

Water temperatures are measured at most of the water-quality stations. In addition, water temperatures are taken at the time of discharge measurements for surface-water stations. For stations where water temperatures are taken manually the water temperatures are taken at about the same time each day. Large streams have a small diel temperature change; shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature. Some streams may be affected by waste-heat discharges. At stations where recording instruments are used, either mean temperatures or maximum and minimum temperatures for each day are published.

Table 3.--Degrees Celsius (°C) to degrees Fahrenheit (°F)*
(Temperature reported to nearest 0.5°C)

°C	°F	°C	°F	°C	°F	°C	°F	°C	°F
0.0	32	10.0	50	20.0	68	30.0	86	40.0	104
.5	33	10.5	51	20.5	69	30.5	87	40.5	105
1.0	34	11.0	52	21.0	70	31.0	88	41.0	106
1.5	35	11.5	53	21.5	71	31.5	89	41.5	107
2.0	36	12.0	54	22.0	72	32.0	90	42.0	108
2.5	36	12.5	54	22.5	72	32.5	90	42.5	108
3.0	37	13.0	55	23.0	73	33.0	91	43.0	109
3.5	38	13.5	56	23.5	74	33.5	92	43.5	110
4.0	39	14.0	57	24.0	75	34.0	93	44.0	111
4.5	40	14.5	58	24.5	76	34.5	94	44.5	112
5.0	41	15.0	59	25.0	77	35.0	95	45.0	113
5.5	42	15.5	60	25.5	78	35.5	96	45.5	114
6.0	43	16.0	61	26.0	79	36.0	97	46.0	115
6.5	44	16.5	62	26.5	80	36.5	98	46.5	116
7.0	45	17.0	63	27.0	81	37.0	99	47.0	117
7.5	45	17.5	63	27.5	81	37.5	99	47.5	117
8.0	46	18.0	64	28.0	82	38.0	100	48.0	118
8.5	47	18.5	65	28.5	83	38.5	101	48.5	119
9.0	48	19.0	66	29.0	84	39.0	102	49.0	120
9.5	49	19.5	67	29.5	85	39.5	103	49.5	121

*°C=5/9(°F-32°) or °F=9/5(°C)+32°.

In October 1968, the Geological Survey began reporting many of the chemical constituents as well as the minor elements in micrograms per liter instead of milligrams per liter. See "Definition of Terms," and table 5 for converting English units to SI units.

The biological information includes qualitative and quantitative analyses of plankton, periphyton, Chlorophyll a and b, biomass and bottom organisms. Microbiological information includes quantitative identification of selected bacteriological indicator organisms.

Solutes

Most methods for collecting and analyzing water samples to determine the kinds and concentrations of solutes are described by Brown, Skougstad, and Fishman (1970). Analysis of pesticides and organic substances in water are described by Goerlitz and Lamar (1967), Lamar, Goerlitz, and Law (1965), and Goerlitz and Brown (1972). The collection and analysis of aquatic, biological, and microbiological samples are described by Slack and others (1973).

Sediment

Suspended-sediment concentrations are determined from samples collected by using depth-integrating samplers. Samples usually are obtained at several verticals in the cross section, or a single sample may be obtained at a fixed point and a coefficient applied to determine the mean concentration in the cross sections.

During periods of rapidly changing flow or rapidly changing concentration, samples may have been collected more frequently (twice daily or, in some instances, hourly). The published sediment discharges for days of rapidly changing flow or concentration were computed by the subdivided day method (time-discharge weighted average). Therefore, for those days when the published sediment discharge value differs from the value computed as the product of discharge times mean concentration times 0.0027, the reader can assume that the sediment discharge for that day was computed by the subdivided day method. For periods when no samples were collected, daily loads of suspended sediment were estimated on the basis of water discharge, sediment concentrations observed immediately before and after the periods, and suspended-sediment loads for other periods of similar discharge. A blank in the daily mean concentration column of the suspended-sediment discharge table indicates the value in the sediment discharge column was estimated. A zero value in the sediment-discharge column when there are nonzero values in the mean discharge and mean concentration columns indicates the load is less than 0.005 ton per day.

At other stations, suspended-sediment samples were collected periodically at many verticals in the stream cross section. Although data collected periodically may represent conditions only at the time of observations, such data are useful in establishing seasonal relations between quality and streamflow in predicting long-term sediment-discharge characteristics of the streams.

In addition to the records of the quantities of suspended sediment, records of the periodic measurements of the particle-size distribution of the suspended sediment and bed material are included.

WATER-SUPPLY PAPERS

The annual series of Water-Supply Papers that give information on quality of surface waters in Colorado are shown in the following table:

Table 4.--Water-Supply Paper numbers and parts, water years 1941-71

Year	Part 6	Part 7	Part 8	Part 9	Irrigation (1951-65)[a]
1941	942	942	942	942	----
1942	950	950	950	950	----
1943	970	970	970	970	----
1944	1022	1022	1022	1022	----
1945	1030	1030	1030	1030	----
1946	1050	1050	1050	1050	----
1947	1102	1102	1102	1102	----
1948	1132	1133	1133	1133	----
1949	1162	1163	1163	1163	----
1950	1187	1188	1188	1189	----
1951	1198	1199	1199	1200	1264
1952	1251	1252	1252	1253	1362
1953	1291	1292	1292	1293	1380
1954	1351	1352	1352	1353	1430
1955	1401	1402	1402	1403	1465
1956	1451	1452	1452	1453	1485
1957	1521	1522	1522	1523	1524
1958	1572	1573	1573	1574	1575
1959	1643	1644	1644	1645	1699
1960	1743	1744	1744	1745	1746
1961	1883	1884	1884	1885	1886
1962	1943	1944	1944	1945	1946
1963	1949	1950	1950	1951	1952
1964	1956	1957	1957	1958	1960
1965	1963	1964	1964	1965	1967
1966	1993	1994	1994	1995	----
1967	2013	2014	2014	2015	----
1968	2095	2096	2097	2098	----
1969	2145	2146	2147	2148	----
1970	2155	2156	2157	2158	----
1971	2165	[b]2166	[b]2167	[b]2168	----

[a] Annual series, "Quality of Surface Waters for Irrigation, Western States."

[b] In preparation.

Information about reports and other data on quality of water in Colorado may be obtained from the district office at the address given on the back of the title page of this report.

EXPLANATION OF GROUND-WATER-LEVEL RECORDS

Collection of Data

Only ground-water level data from a basic national network of observation wells are published herein. These water-level measurements are intended to provide a record of water-level changes in important aquifers.

The locations of wells are referenced by two systems. One system is based on latitude and longitude, and the second is based on the U.S. Bureau of Land Management system of land subdivision. The latitude and longitude grid system facilitates machine processing of data and plotting of data points.

The latitude and longitude grid system is used to provide the geographic location of each well. The number consists of 15 digits. The first six digits denote the degrees, minutes, and seconds of latitude; N designates north; the next seven digits denote degrees, minutes, and seconds of longitude; and the last digit is a sequential number for wells within a 1-second grid, as shown below in figure 4.

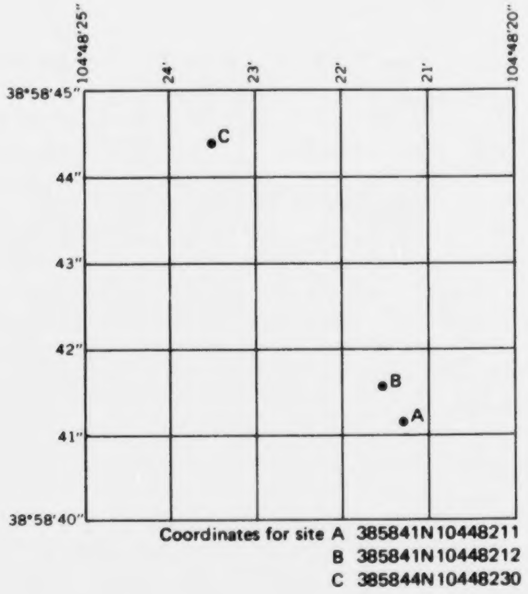
104°48'25"
24'
23'
22'
21'
104°48'20"
38°58'45"
44"
43"
42"
41"
38°58'40"
C
B
A
Coordinates for site A 385841N10448211
B 385841N10448212
C 385844N10448230

Figure 4.--System for numbering wells and miscellaneous sites (latitude and longitude).

The local well number locates a well within a 10-acre (4.0-ha) tract using the U.S. Bureau of Land Management system of land subdivision. The components of the local well number proceed from the largest to the smallest land subdivisions. This is in contrast to the legal description, which proceeds from the smallest to the largest land subdivision. The largest subdivision is the survey. Colorado is governed by three surveys: The Sixth Principal Meridian Survey (S), the New Mexico Survey (N), and the Ute Survey (U). Costilla County was not included in any of the above official surveys. This report follows the convention of the Costilla County Assessor in which the northern part of the county is governed by the Sixth Principal Meridian Survey and the southern part of the county is governed by a local system called the Costilla Survey (C). The first letter of the well location designates the survey.

A survey is subdivided into four quadrants formed by the intersection of the baseline and the principal meridian. The second letter of the well location designates the quadrant: A indicates the northeast quadrant, B the northwest, C the southwest, and D the southeast. A quadrant is subdivided in the north-south direction every 6 mi (10 km) by townships and is subdivided in the east-west direction every 6 mi (10 km) by ranges. The first number of the well location designates the township and the second number designates the range.

The 36-mi^2 (93-km^2) area described by the township and range designation is subdivided into 1-mi^2 (2.59-km^2) areas called sections. The sections are numbered sequentially. The third number of the well location designates the section. The section, which contains 640 acres (259 ha), is subdivided into quarter sections. The 160-acre (64.8-ha) area is designated by the first letter following the section: A indicates the northeast quarter, B the northwest, C the southwest, and D the southeast. The quarter section is subdivided into quarter-quarter sections. The 40-acre (16.2-ha) area is designated in the same manner by the second letter following the section. The quarter-quarter section is subdivided into quarter-quarter-quarter sections. The 10-acre (4.0-ha) area is designated in the same manner by the third letter following the section. If more than one well is located within the 10-acre (4.0-ha) tract, the wells are numbered sequentially in the order in which they were originally inventoried. If this number is necessary, it will follow the three-letter designation.

The local number is provided for continuity with older reports.

Measurements are made in many types of wells under varying conditions, but the methods of measurement are standardized to the extent possible. The equipment and measuring techniques used at each observation well insure that measurements at each well are of consistent accuracy and reliability.

Water-level measurements in this report are given in feet with reference to either mean sea level (msl) or land-surface datum (lsd). Mean sea level is the datum plane on which the national network of precise levels is based; land-surface datum is a datum plane that is approximately at land surface at each well. If known, the altitude of the land-surface datum above mean sea level is given in the well description. The height of the measuring point (MP) above or below land-surface datum is given in each well description. Water levels in wells equipped with recording gages are reported for every fifth day and the end of each month (eom).

Water levels are reported to as many significant figures as can be justified by the local conditions. For example, in a measurement of a depth to water of several hundred feet, the error of determining the absolute value of the total depth to water may be a few tenths of a foot, whereas the error in determining the net change of water level between successive measurements may be only a hundredth or a few hundredths of a foot. For lesser depths to water, the accuracy is greater. Accordingly, most measurements are reported to a hundredth of a foot, but some are given only to a tenth of a foot or a larger unit.

Publications

Publication of ground-water level data for the United States in water-supply papers was begun by the Geological Survey in 1935. From 1935 through 1939, a single water-supply paper covering the entire nation was issued each year (Water-Supply Papers 777, 817, 840, 845, and 886). From 1940 through 1974, separate water-supply papers were issued for six sections of the United States. Water-level data for Colorado are included in the water-supply papers listed below, each report containing one or more calendar years (January through December) of data. Data in this report are for the 12-month water year ending September 30.

Calendar year	WSP no.	Calendar year	WSP no.	Calendar year	WSP no.	Calendar year	WSP no.
1940	910	1945	1027	1950	1169	1955	1408
1941	940	1946	1075	1951	1195	1956-60	1760
1942	948	1947	1100	1952	1225	1961-65	1845
1943	990	1948	1130	1953	1269	1966-70	1980
1944	1020	1949	1160	1954	1325		

Information about reports and other data on ground water in Colorado may be obtained from the district office at the address given on the back of the title page of this report.

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PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS

Thirty-four manuals by the U.S. Geological Survey have been published to date in the series on techniques describing procedures for planning and executing specialized work in water-resources investigations. The material is grouped under major subject headings called books and is further divided into sections and chapters. For example, Section A of Book 3 (Applications of Hydraulics) is on surface water. The chapter, the unit of publication, is limited to a narrow field of subject matter. This format permits flexibility in revision and publication as the need arises. The reports listed below are for sale by the U.S. Geological Survey, Branch of Distribution, 1200 South Eads Street, Arlington, VA 22202 (authorized agent of the Superintendent of Documents, Government Printing Office).

NOTE: When ordering any of these publications, please give the title, book number, chapter number, and "U.S. Geological Survey Techniques of Water-Resources Investigations".

1-D1. *Water temperature--influential factors, field measurement, and data presentation*, by H. H. Stevens, Jr., J. F. Ficke, and G. F. Smoot: USGS--TWRI Book 1, Chapter D1. 1975. 65 pages.

1-D2. *Guidelines for collection and field analysis of ground-water samples for selected unstable constituents*, by W. W. Wood: USGS--TWRI Book 1, Chapter D2. 1976. 24 pages.

2-D1. *Application of surface geophysics to ground-water investigations*, by A. A. R. Zohdy, G. P. Eaton, and D. R. Mabey: USGS--TWRI Book 2, Chapter D1. 1974. 116 pages.

2-E1. *Application of borehole geophysics to water-resources investigations*, by W. S. Keys and L. M. MacCary: USGS--TWRI Book 2, Chapter E1. 1971. 126 pages.

3-A1. *General field and office procedures for indirect discharge measurements*, by M. A. Benson and Tate Dalrymple: USGS--TWRI Book 3, Chapter A1. 1967. 30 pages.

3-A2. *Measurement of peak discharge by the slope-area method*, by Tate Dalrymple and M. A. Benson: USGS--TWRI Book 3, Chapter A2. 1967. 12 pages.

3-A3. *Measurement of peak discharge at culverts by indirect methods*, by G. L. Bodhaine: USGS--TWRI Book 3, Chapter A3. 1968. 60 pages.

3-A4. *Measurement of peak discharge at width contractions by indirect methods*, by H. F. Matthai: USGS--TWRI Book 3, Chapter A4. 1967. 44 pages.

3-A5. *Measurement of peak discharge at dams by indirect methods*, by Harry Hulsing: USGS--TWRI Book 3, Chapter A5. 1967. 29 pages.

3-A6. *General procedure for gaging streams*, by R. W. Carter and Jacob Davidian: USGS--TWRI Book 3, Chapter A6. 1968. 13 pages.

3-A7. *Stage measurements at gaging stations*, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A7. 1968. 28 pages.

3-A8. *Discharge measurements at gaging stations*, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A8. 1969. 65 pages.

3-A11. *Measurement of discharge by moving-boat method*, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 3, Chapter A11. 1969. 22 pages.

3-B1. *Aquifer-test design, observation, and data analysis*, by R. W. Stallman: USGS--TWRI Book 3, Chapter B1. 1971. 26 pages.

3-B2. *Introduction to ground-water hydraulics, a programed text for self-instruction*, by G. D. Bennett: USGS--TWRI Book 3, Chapter B2. 1976. 172 pages.

3-C1. *Fluvial sediment concepts*, by H. P. Guy: USGS--TWRI Book 3, Chapter C1. 1970. 55 pages.

3-C2. *Field methods for measurement of fluvial sediment*, by H. P. Guy and V. W. Norman: USGS--TWRI Book 3, Chapter C2. 1970. 59 pages.

3-C3. *Computation of fluvial-sediment discharge*, by George Porterfield: USGS--TWRI Book 3, Chapter C3. 1972. 66 pages.

4-A1. *Some statistical tools in hydrology*, by H. C. Riggs: USGS--TWRI Book 4, Chapter A1. 1968. 39 pages.

4-A2. *Frequency curves*, by H. C. Riggs: USGS--TWRI Book 4, Chapter A2. 1968. 15 pages.

4-B1. *Low-flow investigations*, by H. C. Riggs: USGS--TWRI Book 4, Chapter B1. 1972. 18 pages.

4-B2. *Storage analyses for water supply*, by H. C. Riggs and C. H. Hardison: USGS--TWRI Book 4, Chapter B2. 1973. 20 pages.

4-B3. *Regional analyses of streamflow characteristics*, by H. C. Riggs: USGS--TWRI Book 4, Chapter B3. 1973. 15 pages.

4-D1. *Computation of rate and volume of stream depletion by wells*, by C. T. Jenkins: USGS--TWRI Book 4, Chapter D1. 1970. 17 pages.

5-A1. *Methods for determination of inorganic substances in water and fluvial sediments*, by M. W. Skougstad and others, editors: USGS--TWRI Book 5, Chapter A1. 1979. 626 pages.

5-A2. *Determination of minor elements in water by emission spectroscopy*, by P. R. Barnett and E. C. Mallory, Jr.: USGS--TWRI Book 5, Chapter A2. 1971. 31 pages.

5-A3. *Methods for analysis of organic substances in water*, by D. F. Goerlitz and Eugene Brown: USGS--TWRI Book 5, Chapter A3. 1972. 40 pages.

5-A4. *Methods for collection and analysis of aquatic biological and microbiological samples*, edited by P. E. Greeson, T. A. Ehlke, G. A. Irwin, B. W. Lium, and K. V. Slack: USGS--TWRI Book 5, Chapter A4. 1977. 332 pages.

5-A5. *Methods for determination of radioactive substances in water and fluvial sediments*, by L. L. Thatcher, V. J. Janzer, and K. W. Edwards: USGS--TWRI Book 5, Chapter A5. 1977. 95 pages.

5-C1. *Laboratory theory and methods for sediment analysis*, by H. P. Guy: USGS--TWRI Book 5, Chapter C1. 1969. 58 pages.

7-C1. *Finite difference model for aquifer simulation in two dimensions with results of numerical experiments*, by P. C. Trescott, G. F. Pinder, and S. P. Larson: USGS--TWRI Book 7, Chapter C1. 1976. 116 pages.

7-C2. *Computer model of two-dimensional solute transport and dispersion in ground water*, by L. F. Konikow and J. D. Bredehoeft: USGS--TWRI Book 7, Chapter C2. 1978. 90 pages.

8-A1. *Methods of measuring water levels in deep wells*, by M. S. Garber and F. C. Koopman: USGS--TWRI Book 8, Chapter A1. 1968. 23 pages.

8-B2. *Calibration and maintenance of vertical-axis type current meters*, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 8, Chapter B2. 1968. 15 pages.

09165000 DOLORES RIVER BELOW RICO, CO

LOCATION.--Lat 37°38'20", long 108°03'35", Dolores County, Hydrologic Unit 14030002, on left bank at upstream side of Montelores bridge northwest of State Highway 145 (relocated), at Dolores-Montezuma County line, 0.5 mi (0.8 km) upstream from Ryman Creek, and 4.0 mi (6.4 km) southwest of Rico.

DRAINAGE AREA.--105 mi² (272 km²).

PERIOD OF RECORD.--October 1951 to current year.

GAGE.--Water-stage recorder. Datum of gage is 8,422.23 ft (2,567.096 m), National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter period, which are poor. No diversion above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--28 years, 130 ft³/s (3.682 m³/s), 94,180 acre-ft/yr (116 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,120 ft³/s (60.0 m³/s) June 10, 1952, gage height, 6.15 ft (1.875 m); minimum daily, 7.0 ft³/s (0.20 m³/s) Nov. 16, 17, 1956, Feb. 6, 7, 1961.

EXTREMES OUTSIDE PERIOD OF RECORD.--Greatest flood since at least 1885 occurred Oct 5, 1911.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 800 ft³/s (23 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
May 29	2300	1,380	39.1	5.20	1.585	June 13	2200	*1,600	45.3	5.35	1.634
June 6	2200	1,560	44.2	5.36	1.634						

Minimum daily discharge, 11 ft³/s (0.31 m³/s) Dec. 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	21	22	15	13	14	18	198	986	874	92	46
2	21	21	22	14	14	14	19	205	909	853	91	45
3	20	24	20	14	14	14	22	200	867	762	82	43
4	20	22	19	15	13	14	19	190	986	624	79	40
5	19	23	20	15	14	14	19	243	1140	535	76	40
6	19	20	18	16	13	14	23	330	1350	505	90	39
7	19	19	16	15	13	16	33	405	1440	500	78	38
8	19	20	15	15	13	20	47	334	1300	505	86	37
9	19	20	15	16	13	20	58	252	1040	470	80	36
10	19	20	14	16	13	18	50	200	895	435	72	39
11	19	24	13	17	13	18	42	170	923	400	57	35
12	19	26	12	17	14	19	35	152	1180	362	75	34
13	19	25	12	15	15	20	32	150	1390	334	71	32
14	19	24	12	15	16	20	36	205	1420	310	70	32
15	18	24	11	16	16	22	56	282	1380	286	73	32
16	18	22	12	16	16	22	96	330	1380	258	113	31
17	18	22	13	16	15	21	130	330	1230	249	104	30
18	18	22	15	16	15	21	150	430	1020	234	85	30
19	18	20	16	16	16	19	172	594	769	225	88	30
20	19	20	16	16	16	19	156	636	702	208	83	30
21	24	20	16	15	16	19	168	741	804	198	72	33
22	30	21	16	16	15	19	195	895	902	190	65	30
23	29	20	16	16	15	18	234	972	1010	170	60	28
24	30	20	16	15	15	18	252	895	1000	158	56	27
25	32	20	15	16	14	18	208	902	944	150	54	26
26	24	20	15	16	15	20	185	944	923	140	52	26
27	22	20	15	16	15	21	168	1210	944	130	50	26
28	22	20	15	16	14	20	185	1200	972	122	47	25
29	22	20	16	15	---	19	205	1190	923	122	47	25
30	22	20	16	14	---	20	188	1220	860	113	59	24
31	22	---	16	14	---	20	---	1060	---	100	54	---
TOTAL	660	640	485	480	404	571	3201	17065	31589	10522	2261	989
MEAN	21.3	21.3	15.6	15.5	14.4	18.4	107	550	1053	339	72.9	33.0
MAX	32	26	22	17	16	22	252	1220	1440	874	113	46
MIN	18	19	11	14	13	14	18	150	702	100	47	24
AC-FT	1310	1270	962	952	801	1130	6350	33850	62660	20870	4480	1960

CAL YR 1978 TOTAL 53652 MEAN 147 MAX 1140 MIN 11 AC-FT 106400
WTR YR 1979 TOTAL 68867 MEAN 189 MAX 1440 MIN 11 AC-FT 136600

09166500 DOLORES RIVER AT DOLORES, CO

LOCATION.--Lat 37°28'16", long 108°30'15", in NE¼NE¼ sec.16, T.37 N., R.15 W., Montezuma County, Hydrologic Unit 14030002, on left bank 70 ft (21 m) downstream from bridge on State Highway 184 in Dolores and 0.4 mi (0.6 km) upstream from Lost Canyon Creek.

DRAINAGE AREA.--504 mi^2 (1,305 km^2).

PERIOD OF RECORD.--June 1895 to October 1903, August 1910 to November 1912, October 1921 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 859: 1937. WRD Colo. 1972: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 6,918.74 ft (2,108.832 m), National Geodetic Vertical Datum of 1929. See WSP 1713 or 1733 for history of changes prior to Oct. 7, 1952.

REMARKS.--Records good except those for winter period, which are poor. Diversions for irrigation of about 2,000 acres (8.1 km^2) above station. Flow partly regulated by Ground Hog Reservoir, cpapcity, 21,710 acre-ft (26.8 hm^3/yr). Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--68 years (water years 1896-1903, 1911-12, 1922-79), 425 ft^3/s (12.04 m^3/s), 307,900 acre-ft/yr (380 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,000 ft^3/s (283 m^3/s) Oct. 5, 1911, gage height, 10.2 ft (3.11 m), site and datum then in use, from rating curve extended above 2,800 ft^3/s (79 m^3/s); minimum daily, 8.0 ft^3/s (0.23 m^3/s) Aug. 16, 1896.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1885, that of Oct. 5, 1911.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,800 ft^3/s (51 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Apr. 23	2200	2,280	64.6	7.06	2.152	June 7	0500	4,130	117	8.47	2.582
May 7	0100	2,480	70.2	7.26	2.213	June 14	0400	3,480	98.6	8.04	2.451
May 30	0230	*4,580	130	8.64	2.633						

Minimum daily discharge, 32 ft^3/s (0.91 m^3/s) Dec. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AJG	SEP
1	54	53	44	44	50	55	136	1480	2800	1560	313	211
2	47	51	42	42	50	60	122	1560	2550	1620	302	184
3	46	57	38	40	55	60	122	1460	2400	1450	337	175
4	44	57	36	40	50	55	110	1290	2700	1280	333	165
5	43	54	46	46	48	55	126	1580	2890	1080	325	162
6	43	51	42	46	44	55	162	1980	3450	1030	329	155
7	43	49	38	42	44	65	270	2260	3720	977	337	170
8	43	48	34	42	44	75	390	1970	3500	998	345	172
9	42	48	34	42	46	90	506	1480	2690	907	353	168
10	42	48	34	46	46	90	506	1170	2290	858	325	165
11	42	63	32	48	46	90	365	1020	2370	810	321	172
12	41	116	36	50	48	95	274	942	2730	756	321	178
13	41	82	36	50	50	110	249	928	2980	760	353	172
14	41	72	36	50	50	120	321	1120	3120	685	325	170
15	41	60	34	50	50	120	535	1600	2960	640	365	170
16	40	61	34	50	55	130	864	1920	2980	590	398	168
17	41	51	34	50	55	120	1200	1990	2640	565	466	162
18	40	57	36	50	60	110	1430	2080	2300	525	365	118
19	40	54	44	50	60	110	1490	2610	1890	502	361	90
20	42	59	44	48	60	100	1260	2730	1660	452	349	83
21	47	59	44	48	65	100	1320	2990	1740	475	302	76
22	70	68	44	50	55	110	1560	3270	1880	448	270	74
23	80	63	48	55	55	140	1790	3570	1920	394	260	66
24	74	58	44	50	55	134	1890	3240	1970	357	288	61
25	84	65	44	55	55	148	1540	3360	1820	333	284	53
26	77	64	44	55	55	150	1400	3330	1830	309	277	50
27	60	46	44	55	60	158	1320	3410	1780	369	274	50
28	55	42	44	55	55	160	1480	3370	1770	369	270	50
29	53	42	44	55	---	175	1630	4170	1740	369	232	49
30	52	42	46	50	---	150	1460	4050	1580	361	232	47
31	52	---	46	50	---	168	---	3260	---	333	252	---
TOTAL	1560	1740	1246	1504	1466	3358	25828	71190	72650	22162	9864	3786
MEAN	50.3	58.0	40.2	48.5	52.4	108	861	2296	2422	715	318	126
MAX	84	116	48	55	65	175	1890	4170	3720	1620	466	211
MIN	40	42	32	40	44	55	110	928	1580	309	232	47
AC-FT	3090	3450	2470	2980	2910	6660	51230	141200	144100	43960	19570	7510

CAL YR 1978 TOTAL 163659 MEAN 448 MAX 2950 MIN 32 AC-FT 324600
WTR YR 1979 TOTAL 216354 MEAN 593 MAX 4170 MIN 32 AC-FT 429100

09168100 DISAPPOINTMENT CREEK NEAR DOVE CREEK, CO

LOCATION.--Lat 37°52'36", long 108°34'57", Dolores County, Hydrologic Unit 14030002, 0.2 mi (0.3 km) downstream from ford, 6.5 mi (10.5 km) southeast of Cedar, and 19 mi (31 km) northeast of town of Dove Creek.

DRAINAGE AREA.--147 mi^2 (381 km^2).

PERIOD OF RECORD.--August 1957 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,420 ft (1,957 m), from topographic map.

REMARKS.--Records good except those for winter period, which are poor. Several small reservoirs and ponds above station. Small diversions for irrigation above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--22 years, 17 ft^3/s (0.481 m^3/s), 12,320 acre-ft/yr (15.2 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,270 ft^3/s (206 m^3/s) July 24, 1977, gage height, 13.38 ft (4.078 m), from rating curve extended above 250 ft^3/s (7.1 m^3/s), on basis of slope-area measurements at gage heights 7.18, 10.26, and 13.38 ft (2.188, 3.127, and 4.078 m); maximum gage height, 13.54 ft (4.127 m) July 13, 1965 (slope-area measurement); no flow at times most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 574 ft^3/s (16.3 m^3/s) May 27, gage height, 5.60 ft (1.707 m), only peak above base of 560 ft^3/s (16 m^3/s); no flow Oct. 1-20, Nov. 1, Aug. 11-15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.20	.20	1.7	20	19	138	141	32	.95	.20
2	.00	.20	.20	.20	1.8	22	16	149	124	35	.95	.30
3	.00	.80	.20	.20	2.0	18	13	135	124	30	.80	.30
4	.00	1.6	.20	.20	2.1	14	12	113	129	30	.65	.30
5	.00	1.6	.20	.20	2.3	14	23	121	135	27	.45	.30
6	.00	1.2	.20	.20	2.4	22	62	141	150	26	1.9	.35
7	.00	.95	.20	.20	2.6	33	83	143	152	26	.96	.25
8	.00	.65	.20	.20	2.8	57	100	139	159	24	3.0	.35
9	.00	.65	.20	.20	3.3	31	131	104	138	20	.55	.35
10	.00	.65	.20	.20	3.6	23	110	86	98	17	.55	.25
11	.00	3.6	.20	.20	4.4	28	51	76	86	15	.00	.35
12	.00	102	.20	.20	5.0	38	36	76	95	14	.00	.25
13	.00	6.3	.20	.20	5.5	35	35	69	104	14	.00	.25
14	.00	3.1	.20	.30	8.5	56	64	78	111	14	.00	.35
15	.00	1.9	.20	.30	9.0	58	149	92	104	13	.00	.45
16	.00	1.9	.20	.40	11	58	226	125	96	12	1.1	.55
17	.00	1.4	.20	.50	16	32	250	139	78	14	1.4	.55
18	.00	1.2	.20	.60	18	30	258	139	68	11	7.6	.55
19	.00	1.2	.20	.60	18	21	201	150	63	10	5.0	.45
20	.00	1.1	.20	.70	20	25	148	161	56	27	4.0	.35
21	3.1	.80	.20	.80	19	26	161	156	52	20	3.0	.35
22	4.5	.65	.20	.80	15	18	217	153	50	15	2.0	.25
23	.95	.65	.20	.80	11	14	238	167	50	10	1.0	.25
24	.55	.55	.20	1.0	8.0	17	204	153	47	8.5	.40	.25
25	1.1	.40	.20	1.0	9.0	24	148	156	42	6.5	.40	.15
26	1.4	.30	.20	1.1	11	32	118	150	41	5.0	.20	.08
27	.65	.20	.20	1.2	15	31	113	225	41	3.2	.20	.15
28	.45	.20	.20	1.3	18	53	150	199	38	2.4	.20	.25
29	.45	.20	.20	1.4	---	49	143	194	35	1.2	.20	.25
30	.45	.20	.20	1.5	---	29	125	191	33	1.0	.20	.25
31	.08	---	.20	1.6	---	30	---	156	---	1.0	.20	---
TOTAL	13.68	136.15	6.20	18.50	246.0	958	3604	4274	2640	484.8	37.86	9.28
MEAN	.44	4.54	.20	.60	8.79	30.9	120	138	88.0	15.6	1.22	.31
MAX	4.5	102	.20	1.6	20	58	258	225	159	35	7.6	.55
MIN	.00	.00	.20	.20	1.7	14	12	69	33	1.0	.00	.08
AC-FT	27	270	12	37	488	1900	7150	8480	5240	962	75	18

CAL YR 1978 TOTAL 6324.33 MEAN 17.3 MAX 153 MIN .00 AC-FT 12540
WTR YR 1979 TOTAL 12428.47 MEAN 34.1 MAX 258 MIN .00 AC-FT 24650

NOTE.--NO GAGE HEIGHT RECORD NOV. 28 TO MAR. 6.

09169500 DOLORES RIVER AT BEDROCK, CO

LOCATION.--Lat 38°18'37", long 108°53'05", in NW¼SW¼ sec.20, T.47 N., R.18 W., Montrose County, Hydrologic Unit 14030002, on right bank at upstream side of bridge, 0.4 mi (0.6 km) southeast of Bedrock, and 3.1 mi (5.0 km) upstream from East Paradox Creek.

DRAINAGE AREA.--2,024 mi^2 (5,242 km^2).

PERIOD OF RECORD.--October 1917 to September 1922 (monthly discharge only for some periods, published in WSP 1313), August 1971 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,940 ft (1,506 m), from topographic map. Prior to Aug. 1, 1971, nonrecording gage at different datum.

REMARKS.--Records good except those for winter period, which are poor. Diversions above station for irrigation of about 5,000 acres (20 km^2) above station and about 33,000 acres (130 km^2) in the San Juan River basin. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--13 years (water years 1918-22, 1972-79), 469 ft^3/s (13.28 m^3/s), 339,800 acre-ft/yr (419 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,280 ft^3/s (263 m^3/s) Apr. 30, 1973, gage height, 12.09 ft (3.685 m), from floodmarks, from rating curve extended above 8,700 ft^3/s (250 m^3/s); no flow Sept. 13, 1974, Aug. 15 to 18, 1978.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Sept. 6, 1970, reached a stage of 7.15 ft (2.179 m), present datum, from floodmarks (discharge not determined).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 8,520 ft^3/s (241 m^3/s) Apr. 19, gage height, 12.39 ft (3.776 m); minimum daily, 3.6 ft^3/s (0.102 m^3/s) Oct. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.9	7.8	22	24	32	110	340	3760	4100	1110	13	7.4
2	3.6	12	31	19	32	100	282	3670	3000	1100	12	6.8
3	3.9	58	29	24	32	110	236	3500	2700	1150	10	6.0
4	3.9	15	25	22	34	100	210	3080	2500	980	9.7	5.7
5	3.9	11	20	24	32	85	193	2890	2710	850	8.9	5.4
6	3.9	12	18	26	30	95	193	3320	3050	632	7.8	5.4
7	3.9	13	18	28	30	120	529	3620	3680	540	7.4	5.0
8	4.2	12	18	20	28	185	1460	3480	3920	512	7.1	4.7
9	4.2	11	16	28	28	220	2230	3160	3490	488	7.1	4.4
10	4.2	10	16	28	28	155	2550	2680	2510	460	6.8	4.2
11	4.2	13	18	26	28	145	2020	2290	1990	388	6.0	4.2
12	4.4	279	18	28	30	136	1470	2150	2050	340	5.7	4.2
13	4.7	301	18	28	30	140	1080	2330	2540	300	5.0	4.2
14	5.0	128	18	20	36	180	1010	2020	2900	247	6.4	4.2
15	5.7	84	18	24	44	247	2350	1930	3050	208	7.4	4.4
16	5.7	69	18	44	70	298	3700	2400	2870	151	15	4.4
17	5.7	52	120	80	75	310	5160	2750	2830	168	85	4.4
18	6.0	40	150	180	80	272	6580	3050	2360	128	48	4.4
19	6.0	34	350	200	80	229	7440	3160	1890	82	20	4.7
20	6.4	29	80	80	90	223	6600	3520	1430	58	16	4.7
21	7.4	28	50	60	90	240	5740	3610	1200	86	15	4.4
22	15	25	28	44	75	216	6020	3880	1240	59	14	4.7
23	15	23	24	38	55	187	6580	4280	1380	42	13	4.7
24	9.3	22	24	34	44	161	6870	4400	1450	37	14	4.7
25	8.5	25	22	34	42	149	5700	4040	1530	30	12	5.0
26	8.2	25	22	34	60	166	4450	4030	1360	26	11	5.4
27	7.4	24	22	34	100	216	3970	4270	1330	22	11	5.7
28	7.4	22	22	34	95	278	4080	5430	1290	21	10	6.0
29	7.8	22	22	32	---	305	4570	4960	1280	19	9.7	5.4
30	7.8	22	22	32	---	379	4180	4770	1250	17	8.9	5.4
31	7.8	---	22	32	---	337	---	4590	---	14	8.2	---
TOTAL	195.0	1428.8	1301	1361	1430	6094	97793	107020	68880	10265	431.1	150.2
MEAN	6.29	47.6	42.0	43.9	51.1	197	3260	3452	2296	331	13.9	5.01
MAX	15	301	350	200	100	379	7440	5430	4100	1150	85	7.4
MIN	3.6	7.8	16	19	28	85	193	1930	1200	14	5.0	4.2
AC-FT	387	2830	2580	2700	2840	12090	194000	212300	136600	20360	855	298

CAL YR 1978 TOTAL 194374.92 MEAN 533 MAX 3590 MIN .00 AC-FT 385500
WTR YR 1979 TOTAL 296349.10 MEAN 812 MAX 7440 MIN 3.6 AC-FT 587800

NOTE.--NO GAGE-HEIGHT RECORD DEC. 20 TO FEB. 4.

09171100 DOLORES RIVER NEAR BEDROCK, CO

LOCATION.--Lat 38°21'29", long 108°49'54", in SW¼NW¼ sec.2, T.47 N., R.18 W., Montrose County, Hydrologic Unit 14030002, on right bank 2.5 mi (4.0 km) downstream from West Paradox Creek and 4.3 mi (6.9 km) northeast of Bedrock.

DRAINAGE AREA.--2,145 mi^2 (5,556 km^2).

PERIOD OF RECORD.--August 1971 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,910 ft (1,497 m), from topographic map. Prior to Feb. 1, 1972, at site 400 ft (120 m) upstream at datum 1.02 ft (0.311 m) higher.

REMARKS.--Records good. Diversions above station for irrigation of about 41,000 acres (170 km^2), of which about 33,000 acres (130 km^2) is in the San Juan River basin. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--8 years, 451 ft^3/s (12.77 m^3/s), 326,700 acre-ft/yr (403 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,500 ft^3/s (269 m^3/s) Apr. 30, 1973, gage height, 12.88 ft (3.926 m), from floodmarks; minimum daily, 0.12 ft^3/s (0.003 m^3/s) July 17, 18, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Sept. 6, 1970, reached a stage of 11.25 ft (3.429 m), site and datum in use prior to Feb. 1, 1972 (discharge, 5,710 ft^3/s or 162 m^3/s), by slope-area measurement at site 1,400 ft (430 m) upstream.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 8,540 ft^3/s (242 m^3/s) Apr. 19, gage height, 12.52 ft (3.816 m); minimum daily, 5.0 ft^3/s (0.140 m^3/s) Oct. 1, 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.0	9.2	30	30	38	131	505	4100	3900	1220	22	10
2	5.0	17	43	24	38	121	408	3950	3100	1200	16	10
3	5.2	100	40	28	40	131	275	3720	2710	1270	14	9.0
4	5.4	26	28	26	42	121	231	3220	2470	1110	12	9.0
5	5.4	16	24	26	40	105	366	2850	2830	982	11	7.4
6	5.4	14	22	30	38	111	370	3220	3080	750	10	7.1
7	5.4	18	22	32	36	145	525	3640	3690	630	10	6.5
8	5.4	16	22	24	36	225	1470	3600	4020	590	10	7.1
9	6.1	15	20	34	34	310	2240	3240	3800	555	10	6.3
10	6.1	14	20	34	36	181	2890	2670	2750	520	9.0	6.1
11	5.9	16	22	30	36	163	2300	2310	2140	448	9.0	6.1
12	5.9	319	22	32	36	149	2070	2230	2180	400	8.0	6.1
13	5.9	505	22	32	38	151	946	2380	2610	352	8.0	6.1
14	6.5	191	22	24	40	198	810	2020	2990	286	9.0	6.3
15	7.1	105	22	28	48	310	1870	2030	3180	231	10	5.9
16	7.4	85	22	50	80	404	3580	2510	2940	190	18	5.9
17	7.4	66	150	100	90	432	5440	2840	2890	192	90	5.9
18	7.4	51	290	220	100	373	6720	2980	2460	185	50	6.1
19	7.4	43	450	250	100	292	7390	3050	2010	110	30	6.1
20	8.0	37	100	100	110	289	6380	3520	1600	60	20	6.1
21	10	33	70	80	110	314	5190	3590	1340	90	18	6.1
22	20	31	34	60	90	272	5700	3800	1320	60	17	6.3
23	18	28	30	50	70	213	6500	4120	1450	50	16	6.1
24	14	27	30	40	60	175	7280	4330	1530	40	17	6.1
25	12	28	28	40	50	161	6460	3980	1600	36	15	6.3
26	10	29	28	42	70	177	5170	4020	1420	30	14	6.3
27	10	28	28	42	121	258	4550	4140	1400	24	14	6.5
28	10	27	28	42	118	373	4650	5340	1370	24	13	6.8
29	10	25	28	40	---	432	5160	5060	1370	22	12	6.8
30	9.8	28	28	40	---	585	4650	4850	1350	20	12	6.3
31	9.8	---	28	40	---	515	---	4650	---	23	11	---
TOTAL	256.9	1947.2	1753	1670	1745	7817	102096	107960	71500	11700	535.0	202.7
MEAN	8.29	64.9	56.5	53.9	62.3	252	3403	3483	2383	377	17.3	6.76
MAX	20	505	450	250	121	585	7390	5340	4020	1270	90	10
MIN	5.0	9.2	20	24	34	105	231	2020	1320	20	8.0	5.9
AC-FT	510	3860	3480	3310	3460	15510	202500	214100	141800	23210	1060	402

CAL YR 1978 TOTAL 197273.42 MEAN 540 MAX 3950 MIN .35 AC-FT 391300
WTR YR 1979 TOTAL 309182.80 MEAN 847 MAX 7390 MIN 5.0 AC-FT 613300

09172500 SAN MIGUEL RIVER NEAR PLACERVILLE, CO

LOCATION.--Lat 38°02'05", long 108°07'15", in NW¼SW¼ sec.30, T.44 N., R.11 W., San Miguel County, Hydrologic Unit 14030003, on right bank 0.7 mi (1.1 km) downstream from Specie Creek and 4.0 mi (6.4 km) northwest of Placerville.

DRAINAGE AREA.--308 mi^2 (798 km^2).

PERIOD OF RECORD.--January to December 1909, September 1910 to December 1912, April 1930 to September 1934, April 1942 to current year. Monthly discharge only for some periods, published in WSP 1313. Published as "at Placerville," 1910-12.

GAGE.--Water-stage recorder. Datum of gage is 7,055.80 ft (2,150.608 m) (Water and Power Resources Service bench mark). See WSP 1713 or 1733 for history of changes prior to Oct. 21, 1958.

REMARKS.--Records good except those for winter period, which are poor. Diversions for irrigation of about 1,700 acres (6.88 km^2) above station. One diversion from Fall Creek for irrigation of about 2,000 acres (8.09 km^2) in Beaver and Saltado Creek basins. One small ditch diverts water from Leopard Creek to Uncompangre River basin. Slight regulation by Lake Hope and Trout Lake of Western Colorado Co., combined capacity, 5,040 acre-ft (6.21 hm^3). Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--43 years (water years 1911-12, 1931-34, 1943-79), 225 ft^3/s (6.372 m^3/s), 163,000 acre-ft/yr (201 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,000 ft^3/s (283 m^3/s) Sept. 5, 1909 (result of failure of Trout and Middle Reservoir Dams); minimum daily, 26 ft^3/s (0.74 m^3/s) Jan. 5, 1960.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 900 ft^3/s (25 m^3/s) and maximum (*):

Date	Time	Discharge		Gage height		Date	Time	Discharge		Gage height	
		(ft^3/s)	(m^3/s)	(ft)	(m)			(ft^3/s)	(m^3/s)	(ft)	(m)
Apr. 23	2100	1,030	29.2	4.53	1.381	June 16	0100	*2,190	62.0	5.38	1.640
May 30	0230	1,400	39.6	4.92	1.500	June 28	0230	1,560	44.2	4.91	1.497
June 7	0230	1,860	52.7	5.20	1.585						

Minimum daily, 48 ft^3/s (1.359 m^3/s) Dec. 14, 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	72	67	73	65	60	60	56	480	890	1230	362	124
2	70	68	74	60	55	60	55	450	780	1300	344	112
3	72	72	67	60	55	60	57	415	762	1220	323	108
4	69	69	74	60	55	60	57	415	880	920	311	108
5	73	69	84	60	60	60	60	485	1120	744	287	114
6	73	69	82	65	55	60	62	522	1460	762	295	106
7	72	64	77	65	55	60	68	554	1660	753	279	106
8	70	63	70	65	55	60	74	498	1560	880	291	112
9	70	63	65	65	55	60	83	410	1150	820	275	105
10	68	64	60	65	55	60	88	371	870	830	241	105
11	65	69	55	65	60	60	80	335	850	820	227	105
12	68	86	50	70	65	55	76	358	1100	744	244	103
13	65	69	50	65	65	58	72	340	1500	699	255	99
14	69	67	48	65	65	61	77	358	1870	708	241	99
15	77	62	48	65	65	61	94	420	1920	626	248	99
16	74	64	50	65	65	62	122	455	1920	575	259	94
17	65	62	55	65	65	61	185	455	1690	596	255	94
18	67	68	60	70	65	62	279	486	1290	568	224	97
19	65	67	65	70	65	60	371	589	960	522	213	88
20	63	69	65	70	65	57	327	666	726	510	206	88
21	67	70	65	65	65	61	344	690	735	510	192	92
22	80	67	65	65	65	59	466	735	940	516	179	89
23	76	64	65	65	65	58	620	820	1100	475	173	84
24	76	63	65	60	65	58	582	717	1170	465	164	84
25	86	68	65	60	65	58	465	744	1160	460	161	89
26	74	67	60	65	60	60	390	800	1230	440	155	84
27	70	65	60	70	60	55	380	1110	1260	420	152	84
28	69	58	60	70	60	57	468	1130	1340	405	148	84
29	67	70	60	70	---	57	440	1110	1290	440	142	76
30	68	70	65	65	---	57	420	1230	1170	415	155	70
31	67	---	65	60	---	58	---	1060	---	366	152	---
TOTAL	2187	2013	1967	2015	1710	1835	6918	19208	36353	20739	7153	2902
MEAN	70.5	67.1	63.5	65.0	61.1	59.2	231	620	1212	669	231	96.7
MAX	86	86	84	70	65	62	620	1230	1920	1300	362	124
MIN	63	58	48	60	55	55	55	335	726	366	142	70
AC-FT	4340	3990	3900	4000	3390	3640	13720	38100	72110	41140	14190	5760

CAL YR 1978 TOTAL 86482 MEAN 237 MAX 1520 MIN 42 AC-FT 171500
WTR YR 1979 TOTAL 105000 MEAN 288 MAX 1920 MIN 48 AC-FT 208300

NOTE.--NO GAGE-HEIGHT RECORD DEC. 19 TO FEB. 6, FEB. 9 TO MAR. 12.

09172600 SALTADO CREEK NEAR NORWOOD, CO

LOCATION.--Lat 37°55'25", long 108°07'51", in NE¼NE¼ sec.12, T.42 N., R.12 W., San Miguel County, Hydrologic Unit 14030003, on right bank 150 ft (46 m) upstream from point of return flow from McCulloch Creek ditch and 18 mi (29 m) southeast of Norwood.

DRAINAGE AREA.--4.53 mi² (11.73 km²).

PERIOD OF RECORD.--April 1976 to current year (seasonal records only).

GAGE.--Water-stage recorder. Altitude of gage is 9,270 ft (2,825 m), from topographic map.

REMARKS.--Records good except those for winter period, which are fair. Seasonal station operated only for runoff period April to July. No diversion above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 62 ft³/s (1.76 m³/s) May 18, 1979, gage height, 3.23 ft (0.984 m); minimum daily, 0.02 ft³/s (0.001 m³/s) July 13, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 62 ft³/s (1.76 m³/s) at 1700 May 18, gage height, 3.23 ft (0.984 m); minimum daily, 0.80 ft³/s (0.023 m³/s) Apr. 1-3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							.80	9.5	23	6.1		
2							.80	11	20	6.3		
3							.80	9.0	19	6.1		
4							.85	8.3	20	5.5		
5							.90	13	21	4.9		
6							.95	18	22	4.4		
7							1.0	17	24	4.1		
8							1.1	13	28	3.9		
9							1.2	9.5	25	3.4		
10							1.2	8.1	20	3.2		
11							1.2	6.9	18	2.9		
12							1.1	7.4	18	2.7		
13							1.0	10	18	2.5		
14							1.1	17	18	2.5		
15							1.2	23	18	2.5		
16							1.6	24	17	2.6		
17							2.0	25	16	2.5		
18							3.4	32	14	2.5		
19							4.6	34	13	2.1		
20							4.8	32	11	2.1		
21							5.0	33	9.5	2.0		
22							6.0	33	9.3	2.0		
23							6.5	28	8.8	1.7		
24							6.5	26	8.5	1.6		
25							6.5	26	7.8	1.4		
26							7.2	30	7.8	1.4		
27							6.9	40	7.8	1.4		
28							6.7	35	7.4	1.2		
29							7.4	32	6.7	1.2		
30							7.8	29	6.3	.99		
31							---	26	---	.93		
TOTAL							98.10	665.7	462.9	88.62		
MEAN							3.27	21.5	15.4	2.86		
MAX							7.8	40	28	6.3		
MIN							.80	6.9	6.3	.93		
AC-FT							195	1320	918	176		

09172700 GURLEY DITCH NEAR NORWOOD, CO

LOCATION.--Lat 38°00'54", long 108°14'27", in SE¼NE¼ sec.1, T.43 N., R.13 W., San Miguel County, Hydrologic Unit 14030003, on right bank 0.9 mi (1.4 km) upstream from Gurley Reservoir and 8.4 mi (13.5 km) south of Norwood.

PERIOD OF RECORD.--May 1975 to current year (irrigation season only).

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 8,340 ft (2,542 m), from topographic map.

REMARKS.--Records good. Gurley ditch diverts water from tributaries of Beaver Creek to Gurley Reservoir. Water is used for irrigation of lands near Norwood. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 392 ft^3/s (11.1 m^3/s) June 5, 1975; no flow at times most years.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							.00	.00	204	158	20	9.0
2							.00	.00	193	151	19	7.5
3							.00	.00	200	133	18	7.0
4							.00	18	261	115	18	7.5
5							.00	93	258	100	16	6.5
6							.00	134	175	94	18	6.0
7							.00	142	170	89	18	5.5
8							.00	116	121	82	18	5.5
9							.00	81	56	75	16	5.0
10							.00	66	53	71	16	4.5
11							.00	56	161	67	15	4.0
12							.00	49	193	63	14	3.8
13							.00	53	168	59	16	3.8
14							.00	70	181	56	16	3.5
15							.00	124	145	52	16	3.5
16							.00	175	161	54	16	3.5
17							.00	181	161	52	20	3.2
18							.00	207	153	49	15	3.0
19							2.0	247	204	44	17	3.0
20							4.0	260	180	42	15	3.0
21							6.0	272	163	44	13	5.5
22							9.6	288	155	39	11	3.5
23							.00	267	168	35	10	3.0
24							.00	249	168	31	9.6	3.0
25							.00	256	138	30	9.0	3.5
26							.00	252	158	28	8.5	3.5
27							.00	265	163	26	9.0	3.8
28							.00	173	163	26	8.5	3.8
29							.00	159	173	26	8.0	3.5
30							.00	222	164	23	10	3.5
31							---	204	---	20	12	---
TOTAL							21.60	4679.00	5011	1934	445.6	134.9
MEAN							.72	151	167	62.4	14.4	4.50
MAX							9.6	288	261	158	20	9.0
MIN							.00	.00	53	20	8.0	3.0
AC-FT							43	9280	9940	3840	884	268

09172800 WEST BEAVER CREEK NEAR NORWOOD, CO

LOCATION.--Lat 37°53'21", long 108°11'49", San Miguel County, Hydrologic unit 14030003, on left bank 75 ft (23 m) downstream from trail bridge and 17.5 mi (28.2 km) southeast of Norwood.

DRAINAGE AREA.--4.83 mi² (12.51 km²).

PERIOD OF RECORD.--April 1976 to current year (seasonal records only).

GAGE.--Water-stage recorder. Altitude of gage is 9,750 ft (2,972 m), from topographic map.

REMARKS.--Records good except those for winter period, which are poor. No diversion above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 101 ft³/s (2.86 m³/s) June 6, 1979, gage height, 3.51 ft (1.100 m); maximum gage height, 5.83 ft (1.777 m) May 2, 1977 (backwater from ice); minimum daily discharge, 0.50 ft³/s (0.014 m³/s) Apr. 1, 1977.

EXTREMES FOR CURRENT SEASON.--Maximum discharge, 101 ft³/s (2.86 m³/s) at 1930 June 6, gage height, 3.51 ft (1.100 m); minimum daily, 1.2 ft³/s (0.033 m³/s) Apr. 1, 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							1.2	14	78	35		
2							1.2	16	72	34		
3							1.4	19	74	31		
4							1.4	16	78	27		
5							1.4	14	82	25		
6							1.8	23	82	23		
7							2.0	30	80	21		
8							2.2	26	71	20		
9							2.4	22	56	18		
10							2.6	17	51	17		
11							2.4	14	57	15		
12							2.2	12	66	14		
13							2.2	12	70	13		
14							2.4	18	70	12		
15							2.8	30	71	12		
16							3.6	42	65	12		
17							6.0	41	61	11		
18							8.0	49	51	10		
19							11	64	44	10		
20							10	67	42	10		
21							11	70	44	10		
22							14	77	42	9.1		
23							18	77	41	7.9		
24							17	74	38	7.5		
25							13	76	39	7.2		
26							12	77	38	6.5		
27							12	84	37	5.8		
28							12	84	34	5.8		
29							11	86	34	5.8		
30							13	86	32	5.5		
31							---	83	---	4.8		
TOTAL							201.2	1420	1700	445.9		
MEAN							6.71	45.8	56.7	14.4		
MAX							18	86	82	35		
MIN							1.2	12	32	4.8		
AC-FT							399	2820	3370	884		

09173000 BEAVER CREEK NEAR NORWOOD, CO

LOCATION.--Lat 37°58'13", Long 108°11'42", in NE¼SW¼ sec.21, T.43 N., R.12 W., San Miguel County, Hydrologic Unit 14030003, on right bank 250 ft (76 m) downstream from county road culvert, 550 ft (170 m) upstream from Goat Creek, and 13 mi (21 km) southeast of Norwood.

DRAINAGE AREA.--40.6 mi^2 (105.2 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1941 to September 1961, October 1962 to September 1967, April 1975 to current year. Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder. Altitude of gage is 8,010 ft (2,441 m), from topographic map. Prior to July 16, 1952, at site 135 ft (41 m) downstream at different datums. July 17, 1952, to Sept. 30, 1961, at site 85 ft (26 m) downstream at different datum. Oct. 1, 1962, to Sept. 30, 1967, at site 200 ft (61 m) upstream at datum 8,016.81 ft (2,443.524 m) above mean sea level (Water and Power Resources Service bench mark). Datum lowered 2.00 ft (0.610 m) Oct. 1, 1948, and raised 8.00 ft (2.438 m) Oct. 1, 1962. Concrete control July 16, 1964, to Sept. 30, 1967.

REMARKS.--Records good except those for winter period, which are poor. Gurley ditch (station 09172700) diverts water above station to Gurley Reservoir, capacity, 8,800 acre-ft (10.9 hm^3); prior to September 1948, 3,200 acre-ft (3.95 hm^3), for irrigation of about 12,000 acres (48.6 km^2) in Naturita Creek drainage. Several observations of water temperature were obtained and are published elsewhere in this report.

COOPERATION.--Records collected and computed by Colorado Division of Water Resources and reviewed by Geological Survey.

AVERAGE DISCHARGE.--29 years (water years 1942-61, 1963-67, 1976-79), 15.3 ft^3/s (0.433 m^3/s), 11,080 acre-ft/yr (13.7 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 750 ft^3/s (21.2 m^3/s) June 9 or 10, 1952, gage height, 5.67 ft (1.728 m), from floodmarks, site and datum then in use, from rating curve extended above 370 ft^3/s (10 m^3/s); no flow at times in many years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 225 ft^3/s (6.37 m^3/s) at 0230 June 8, gage height, 4.60 ft (1.402 m); maximum gage height, 4.64 ft (1.414 m) at 2130 May 29, due to shifting control; no flow Sept. 10-17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.30	1.0	1.3	1.0	1.0	1.5	7.5	66	152	6.0	.48	.22
2	.30	1.0	1.3	1.0	1.0	1.5	7.0	84	140	6.0	.38	.12
3	.30	1.2	1.2	1.0	1.0	1.5	7.0	80	130	6.0	.30	.09
4	.32	1.2	1.2	1.0	1.0	1.5	7.0	58	97	5.6	.28	.08
5	.35	1.2	1.2	1.5	1.0	1.5	8.0	57	108	4.3	.20	.06
6	.32	1.1	1.2	1.5	1.0	1.5	10	72	183	2.6	.22	.04
7	.32	1.0	1.2	1.5	1.0	2.0	11	72	189	2.3	.25	.03
8	.38	1.0	1.1	1.5	1.0	4.0	10	58	217	2.1	.40	.03
9	.38	1.0	1.0	1.5	1.0	6.0	13	50	189	1.9	.54	.02
10	.38	1.0	1.0	1.5	1.0	5.5	12	38	148	1.7	.52	.00
11	.44	1.4	1.0	1.5	1.0	5.0	11	34	112	1.6	.38	.00
12	.48	2.7	1.0	1.5	1.0	6.0	11	34	147	1.4	.28	.00
13	.60	2.1	1.0	1.5	1.5	8.0	12	34	181	1.4	.28	.00
14	.64	1.7	1.0	1.5	1.5	8.0	14	50	189	1.3	.32	.00
15	.68	1.8	1.0	1.5	1.5	10	19	50	195	1.3	.50	.00
16	.68	1.7	1.0	1.5	1.5	10	25	60	189	1.5	.50	.00
17	.80	1.7	1.0	1.5	1.5	9.0	33	60	160	1.7	1.2	.00
18	1.1	1.7	1.5	1.5	1.5	8.0	37	62	105	1.5	.80	.09
19	1.4	1.4	1.5	1.5	1.5	7.0	41	71	19	1.5	1.2	.68
20	1.3	1.4	1.5	1.5	1.5	7.5	39	68	14	1.5	.94	1.0
21	1.7	1.3	1.5	1.5	1.5	8.0	46	72	41	1.6	.64	2.0
22	2.6	1.4	1.5	1.5	1.5	7.5	58	98	54	1.7	.44	1.3
23	2.5	1.3	1.5	1.5	1.5	7.0	76	135	36	1.4	.35	1.2
24	2.4	1.3	1.5	1.5	1.5	7.5	82	113	29	1.3	.22	1.2
25	2.6	1.3	1.5	1.5	1.5	8.5	70	120	51	1.2	.15	.94
26	1.8	1.4	1.5	1.5	1.5	10	65	142	45	1.0	.14	.64
27	1.4	1.4	1.5	1.5	1.5	9.5	57	177	42	.87	.14	.52
28	1.2	1.4	1.5	1.5	1.5	11	62	179	24	.72	.09	.40
29	1.1	1.4	1.5	1.5	---	9.5	58	177	7.8	.72	.08	.38
30	1.0	1.4	1.5	1.0	---	8.5	50	177	6.5	.60	.14	.35
31	1.0	---	1.5	1.0	---	8.0	---	162	---	.60	.25	---
TOTAL	30.77	41.9	39.7	43.5	36.0	200.0	958.5	2710	3200.3	64.91	12.91	11.39
MEAN	.99	1.40	1.28	1.40	1.29	6.45	32.0	87.4	107	2.09	.42	.38
MAX	2.6	2.7	1.5	1.5	1.5	11	82	179	217	6.0	1.2	2.0
MIN	.30	1.0	1.0	1.0	1.0	1.5	7.0	34	6.5	.60	.08	.00
AC-FT	61	83	79	86	71	397	1900	5380	6350	129	26	23

CAL YR 1978 TOTAL 3902.06 MEAN 10.7 MAX 136 MIN .00 AC-FT 7740
WTR YR 1979 TOTAL 7349.88 MEAN 20.1 MAX 217 MIN .00 AC-FT 14580

NOTE.--NO GAGE-HEIGHT RECORD DEC. 14 TO APR. 17.

09173000 BEAVER CREEK NEAR NORWOOD, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 1977 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	TEMPER-ATURE (DEG C)
OCT		
11...	1530	12.0
24...	1500	7.0
30...	1110	5.0
NOV		
16...	1510	1.0
27...	1200	.0
DEC		
01...	1050	1.0
JAN		
30...	1215	.0
FEB		
26...	1100	.0
APR		
02...	1200	.0
19...	1200	4.0
30...	1045	3.0

DATE	TIME	TEMPER-ATURE (DEG C)
APR		
30...	1445	7.0
MAY		
21...	1050	7.0
JUN		
14...	1325	12.0
25...	1100	11.0
JUL		
12...	1710	22.0
24...	1450	24.0
31...	1120	18.0
AUG		
07...	1520	20.0
27...	1105	16.0
SEP		
20...	1420	15.0

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREP-TOCOCCI FECAL, (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)
OCT										
30...	1110	1.0	320	8.3	9.4	15	K3	K5	140	12
NOV										
27...	1200	1.5	320	8.5	10.0	3	K5	K30	140	15
JAN										
30...	1215	2.0	270	8.7	10.8	9	K1	K1	120	38
FEB										
26...	1100	2.0	230	7.8	10.8	2	<1	K250	120	19
APR										
02...	1200	7.0	270	7.2	10.8	13	--	--	120	24
30...	1445	46	179	8.7	9.0	15	<1	K5	82	16
MAY										
21...	1050	60	180	8.5	9.0	20	K2	K6	73	16
JUN										
25...	1100	78	160	8.0	8.2	24	K11	26	51	12
JUL										
31...	1120	.68	300	7.8	7.0	6	52	44	150	19
AUG										
27...	1105	.20	320	7.8	7.4	63	20	K12	140	10

K BASED ON NON-IDEAL COLONY COUNT.

09173000 BEAVER CREEK NEAR NORWOOD, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
OCT 30...	41	10	5.8	.2	1.0	160	0	130	25	1.7
NOV 27...	39	9.6	5.3	.2	.8	140	4	120	30	1.6
JAN 30...	35	8.0	4.8	.2	.7	100	0	82	36	3.3
FEB 26...	34	7.9	4.7	.2	.6	120	0	98	27	1.2
APR 02...	34	9.1	6.0	.2	1.0	120	0	98	27	1.1
30...	24	5.4	4.0	.2	.8	81	0	66	15	1.3
MAY 21...	22	4.5	3.4	.2	.8	70	0	57	11	1.3
JUN 25...	15	3.2	2.2	.1	.5	47	0	39	14	.8
JUL 31...	42	11	6.9	.2	1.5	160	0	130	27	1.6
AUG 27...	41	9.4	5.5	.2	1.1	160	0	130	31	1.3

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)
OCT 30...	.1	9.7	176	173	.24	.48	.01	.01	.14
NOV 27...	.1	8.9	172	168	.23	.70	.01	.01	.18
JAN 30...	.1	9.5	179	147	.24	.97	.00	.01	.30
FEB 26...	.1	9.7	142	144	.19	.77	.01	.02	.12
APR 02...	.1	9.1	151	147	.21	2.85	.00	.01	.06
30...	.1	8.8	117	99	.16	14.5	.83	.00	.26
MAY 21...	.1	7.6	96	85	.13	15.6	.27	.03	.32
JUN 25...	.1	8.6	76	68	.10	16.0	.02	.03	.19
JUL 31...	.7	10	178	180	.24	.33	.01	.00	.14
AUG 27...	.1	9.0	180	177	.24	.10	.01	.00	.29

09173000 BEAVER CREEK NEAR NORWOOD, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	BORON, DISSOLVED (UG/L AS B)	IRON, DISSOLVED (UG/L AS FE)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C)	PHYTOPLANKTON, TOTAL (CELLS PER ML)
OCT 30...	.15	.16	.00	.00	30	<10	5.5	.6	44
NOV 27...	.19	.20	.00	.01	20	10	2.7	.3	67
JAN 30...	.31	.31	.00	.01	7	30	3.0	.9	5
FEB 26...	.14	.15	.01	.01	10	20	3.1	.4	71
APR 02...	.07	.07	.01	.01	40	20	2.4	--	190
30...	.26	1.1	.05	--	30	50	6.2	.4	520
MAY 21...	.35	.62	.02	.01	30	30	7.6	.8	660
JUN 25...	.22	.24	.00	.01	30	160	5.6	--	65
JUL 31...	.14	.15	.07	.01	30	10	3.8	--	90
AUG 27...	.29	.30	.01	.00	20	10	10	--	230

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	BARIUM, DISSOLVED (UG/L AS BA)	BARIUM, RECOV. FM BOTTOM MATERIAL (UG/G AS BA)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BERYLLIUM, DISSOLVED (UG/L AS BE)	BERYLLIUM, RECOV. FM BOTTOM MATERIAL (UG/G)
NOV 27...	1200	0	--	0	--	--	50	--	--	<1	--
FEB 26...	1100	0	--	0	--	--	0	--	--	0	--
MAY 21...	1050	30	1	1	1	100	0	110	0	0	0

DATE	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COBALT, DISSOLVED (UG/L AS CO)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)	COPPER, DISSOLVED (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)
NOV 27...	--	1	--	--	0	--	--	4	--	0	--
FEB 26...	--	0	--	--	0	--	--	0	--	3	--
MAY 21...	0	1	0	0	0	7	0	0	0	0	12

DATE	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	LITHIUM TOTAL RECOVERABLE (UG/L AS LI)	LITHIUM DISSOLVED (UG/L AS LI)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY DISSOLVED (UG/L AS HG)
NOV 27...	--	0	--	--	<4	--	2	--	--	.0
FEB 26...	--	0	--	--	0	--	0	--	--	.0
MAY 21...	7	2	10	7	3	10	0	440	.0	.0

09173000 BEAVER CREEK NEAR NORWOOD, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	MERCURY RECOV. FM BOT-TOM MA-TERIAL (UG/G AS HG)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	MOLYB-DENUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	NICKEL, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SELE-NIUM, TOTAL IN BOT-TOM MA-TERIAL (UG/G)
NOV										
27...	--	--	0	--	--	0	--	--	1	--
FEB										
26...	--	--	1	--	--	0	--	--	1	--
MAY										
21...	.02	1	0	8	9	2	0	1	0	0

DATE	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	ZINC, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS ZN)	GROSS ALPHA, DIS-SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS-SOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)
NOV										
27...	.6	--	<3	--	--	--	--	--	--	--
FEB										
26...	.4	--	20	--	--	--	--	--	--	--
MAY										
21...	.5	20	10	54	<1.5	.4	1.6	<.4	1.5	<.4

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT					
30...	1110	1.0	3	.01	--
NOV					
27...	1200	1.5	1	.00	100
DEC					
26...	1130	1.5	2	.01	50
JAN					
30...	1215	2.0	3	.02	--
FEB					
26...	1100	2.0	1	<.01	0
APR					
02...	1200	7.0	6	.11	67
APR					
30...	1445	46	9	1.1	100
MAY					
21...	1050	60	15	2.4	90
JUN					
25...	1100	78	14	2.9	84
JUL					
31...	1120	.68	1	<.01	--
AUG					
27...	1105	.20	1	<.01	--

09173000 BEAVER CREEK NEAR NORWOOD, CO--Continued

PHYTOPLANKTON ANALYSES, OCTOBER 1978 TO AUGUST 1979

DATE TIME	OCT 30,78 1110	NOV 27,78 1200	DEC 26,78 1130	JAN 30,79 1215	FEB 26,79 1100
TOTAL CELLS/ML	44	67	180	5	71
DIVERSITY: DIVISION	0.0	0.9	0.8	0.0	0.7
.CLASS	0.0	0.9	0.8	0.0	0.7
..ORDER	0.0	0.9	0.8	0.0	0.7
...FAMILY	0.0	1.6	0.9	0.0	2.6
....GENUS	1.0	1.6	0.9	0.0	2.6

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)										
.CHLOROPHYCEAE										
..CHLOROCOCCALES										
...OOCYSTACEAE										
....TREUBARIA	--	-	--	-	8	4	--	-	--	-
...SCENEDESMACEAE										
....SCENEDESMUS	--	-	--	-	--	-	--	-	--	-
..VOLVOCALES										
...CHLAMYDOMONADACEAE										
....CHLAMYDOMONAS	--	-	--	-	--	-	--	-	--	-
CHRYSOPHYTA										
.BACILLARIOPHYCEAE										
..CENTRALES										
...COSCINODISCACEAE										
....CYCLOTELLA	--	-	--	-	--	-	--	-	--	-
....MELOSIRA	--	-	--	-	--	-	--	-	--	-
....STEPHANODISCUS	--	-	--	-	--	-	--	-	--	-
..PENNALES										
...ACHNANTHACEAE										
....ACHNANTHES	--	-	--	-	--	-	--	-	--	-
....COCCONEIS	--	-	22#	33	--	-	--	-	--	-
....RHOICOSPHENIA	--	-	--	-	--	-	--	-	--	-
...CYMBELLACEAE										
....CYMBELLA	--	-	--	-	8	4	--	-	5	7
...FRAGILARIACEAE										
....FRAGILARIA	--	-	--	-	--	-	--	-	--	-
....SYNEDRA	--	-	22#	33	--	-	--	-	--	-
...GOMPHONEMATACEAE										
....GOMPHONEMA	--	-	--	-	--	-	--	-	5	7
...MERIDIONACEAE										
....MERIDION	--	-	--	-	--	-	--	-	10	14
...NAVICULACEAE										
....FRUSTULIA	--	-	--	-	--	-	--	-	--	-
....GYROSIGMA	22#	50	--	-	--	-	--	-	--	-
....NAVICULA	22#	50	--	-	15	8	--	-	5	7
...NITZSCHIACEAE										
....NITZSCHIA	--	-	--	-	--	-	5#	100	30#	43
...SURIRELLACEAE										
....SURIRELLA	--	-	--	-	--	-	--	-	5	7
CRYPTOPHYTA (CRYPTOMONADS)										
.CRYPTOPHYCEAE										
..CRYPTOMONADALES										
...CRYPTOMONADACEAE										
....CRYPTOMONAS	--	-	--	-	--	-	--	-	5	7
CYANOPHYTA (BLUE-GREEN ALGAE)										
.CYANOPHYCEAE										
..CHROOCOCCALES										
...CHROOCOCCACEAE										
....ANACYSTIS	--	-	--	-	--	-	--	-	5	7
..HORMOGONALES										
...OSCILLATORIACEAE										
....OSCILLATORIA	--	-	--	-	150#	83	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)										
.EUGLENOPHYCEAE										
..EUGLENALES										
...EUGLENACEAE										
....TRACHELOMONAS	--	-	22#	33	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM: EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED: LESS THAN 1/2%

PHYTOPLANKTON ANALYSES, OCTOBER 1978 TO AUGUST 1979

DATE	APR 2,79	APR 30,79	MAY 21,79	JUN 25,79	AUG 27,79
TIME	1200	1445	1050	1100	1105
TOTAL CELLS/ML	190	520	660	65	230
DIVERSITY: DIVISION	0.2	0.7	0.1	1.0	0.0
.CLASS	0.2	0.7	0.1	1.0	0.0
..ORDER	0.5	0.7	0.9	1.0	0.0
...FAMILY	2.7	1.0	2.7	1.5	1.7
....GENUS	2.8	1.0	2.8	1.5	2.5

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)										
.CHLOROPHYCEAE										
..CHLOROCOCCALES										
...OOCYSTACEAE										
....TREUBARIA	--	-	--	-	--	-	--	-	--	-
...SCENEDESMACEAE										
....SCENEDESMUS	--	-	--	-	--	-	26#	40	--	-
..VOLVOCALES										
...CHLAMYDOMONADACEAE										
....CHLAMYDOMONAS	--	-	--	-	13	2	--	-	--	-
CHRYSOPHYTA										
.BACILLARIOPHYCEAE										
..CENTRALES										
...COSCINODISCACEAE										
....CYCLOTELLA	10	5	--	-	--	-	--	-	--	-
....MELOSIRA	--	-	--	-	130#	20	--	-	--	-
....STEPHANODISCUS	--	-	--	-	26	4	--	-	--	-
..PENNALES										
...ACHNANTHACEAE										
....ACHNANTHES	--	-	--	-	--	-	--	-	30	13
....COCCONEIS	10	5	--	-	--	-	--	-	86#	37
....RHOICOSPHENIA	--	-	--	-	--	-	--	-	25	11
...CYMBELLACEAE										
....CYMBELLA	--	-	--	-	--	-	--	-	5	2
...FRAGILARIACEAE										
....FRAGILARIA	20	11	--	-	--	-	--	-	--	-
....SYNEDRA	--	-	28	5	65	10	--	-	10	4
...GOMPHONEMATACEAE										
....GOMPHONEMA	55#	29	56	11	120#	18	26#	40	45#	20
...MERIDIONACEAE										
....MERIDION	30#	16	--	-	26	4	--	-	--	-
...NAVICULACEAE										
....FRUSTULIA	5	3	--	-	--	-	--	-	--	-
....GYROSIGMA	--	-	--	-	--	-	--	-	--	-
....NAVICULA	25	13	14	3	120#	18	--	-	25	11
...NITZSCHIACEAE										
....NITZSCHIA	30#	16	--	-	140#	22	--	-	5	2
...SURIRELLACEAE										
....SURIRELLA	--	-	--	-	26	4	13#	20	--	-
CRYPTOPHYTA (CRYPTOMONADS)										
.CRYPTOPHYCEAE										
..CRYPTOMONADALES										
...CRYPTOMONADACEAE										
....CRYPTOMONAS	5	3	--	-	--	-	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)										
.CYANOPHYCEAE										
..CHROOCOCCALES										
...CHROOCOCCACEAE										
....ANACYSTIS	--	-	420#	81	--	-	--	-	--	-
..HORMOGONALES										
...OSCILLATORIACEAE										
....OSCILLATORIA	--	-	--	-	--	-	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)										
.EUGLENOPHYCEAE										
..EUGLENALES										
...EUGLENACEAE										
....TRACHELOMONAS	--	-	--	-	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM, EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

09174700 WEST NATURITA CREEK AT UPPER STATION, NEAR NORWOOD, CO

LOCATION.--Lat 37°54'39", long 108°20'08", unsurveyed, San Miguel County, Hydrologic Unit 14030003, on left bank 1,000 ft (300 m) downstream from Spectacle Creek and 22 mi (35 km) southwest of Norwood.

DRAINAGE AREA.--7.31 mi² (18.93 km²).

PERIOD OF RECORD.--May 1975 to current year (seasonal record only).

GAGE.--Water-stage recorder. Altitude of gage is 8,180 ft (2,490 m), from topographic map.

REMARKS.--Records good. No diversion above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 96 ft³/s (2.72 m³/s) June 3, 1975, gage height, 2.28 ft (0.695 m); minimum daily, 0.40 ft³/s (0.011 m³/s) Apr. 2-4, July 10, 1977.

EXTREMES FOR CURRENT SEASON.--Maximum discharge, 63 ft³/s (1.78 m³/s) at 1900 May 30, gage height, 2.02 ft (0.616 m); minimum daily, 1.4 ft³/s (0.040 m³/s) April 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							1.5	9.6	47	16		
2							1.4	10	42	16		
3							1.5	11	45	15		
4							1.5	10	44	15		
5							1.5	11	45	14		
6							1.6	12	43	13		
7							1.7	14	45	12		
8							1.9	15	45	11		
9							2.2	12	39	10		
10							2.4	10	36	9.6		
11							2.3	10	36	8.8		
12							2.0	9.6	43	8.4		
13							1.8	10	44	7.7		
14							2.0	13	44	7.4		
15							2.6	15	43	6.9		
16							3.2	28	35	6.9		
17							4.6	23	33	6.6		
18							5.8	24	22	6.0		
19							6.6	29	23	5.5		
20							6.6	27	20	5.5		
21							6.6	18	19	5.2		
22							6.8	28	19	4.8		
23							7.7	20	19	4.4		
24							8.8	13	19	4.4		
25							8.4	9.6	18	3.8		
26							8.0	12	17	3.8		
27							7.4	39	17	3.4		
28							7.7	44	18	3.2		
29							8.8	45	16	3.2		
30							8.8	50	16	3.0		
31							---	54	---	2.6		
TOTAL							133.7	635.8	952	243.1		
MEAN							4.46	20.5	31.7	7.84		
MAX							8.8	54	47	16		
MIN							1.4	9.6	16	2.6		
AC-FT							265	1260	1890	482		

09175000 WEST NATURITA CREEK NEAR NORWOOD, CO
(Formerly published as Naturita Creek near Norwood)

LOCATION.--Lat 37°58'33", long 108°19'38", in SW¼NW¼ sec.23, T.43 N., R.13 W., San Miguel County, Hydrologic Unit 14030003, on right bank 500 ft (150 m) downstream from Middle Naturita Creek, 0.4 mi (0.6 km) downstream from Miramonte Reservoir, and 11 mi (18 km) south of Norwood.

DRAINAGE AREA.--53.0 mi² (137.3 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1940 to September 1952, April 1975 to current year. Prior to April 1975, published as "Naturita Creek near Norwood." Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder. Altitude of gage is 7,601 ft (2,317 m), from topographic map.

REMARKS.--Records good. Many small diversions above station for irrigation of few hundred acres above and below station and diversion by Lilyland Canal to Dry Creek basin for few hundred acres; flow regulated by Miramonte Reservoir, capacity, 6,800 acre-ft (8.38 hm³). Small Colorado Fish and Game Department lake would have very little effect on flow. Several observations of water temperature were obtained and are published elsewhere in this report.

COOPERATION.--Records collected and computed by Colorado Division of Water Resources and reviewed by Geological Survey.

AVERAGE DISCHARGE.--16 years (water years 1941-52, 1976-79), 9.25 ft³/s (0.262 m³/s), 6,700 acre-ft/yr (8.26 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 943 ft³/s (26.7 m³/s) July 24, 1945, gage height, 5.19 ft (1.582 m), site and datum then in use, from rating curve extended above 200 ft³/s (5.7 m³/s), on basis of slope-area measurement at gage height 4.80 ft (1.463 m); no flow at times in 1945, 1948, 1950-51.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 155 ft³/s (4.39 m³/s) at 1430 May 26, gage height, 4.98 ft (1.518 m); minimum daily, 0.78 ft³/s (0.022 m³/s) Oct. 23, 25-29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.84	.80	.88	1.3	1.5	1.0	2.4	31	81	6.4	2.1	1.4
2	.84	.88	.88	1.3	1.5	1.0	2.2	35	71	6.4	2.0	1.3
3	.84	.88	.92	1.3	1.5	1.0	2.1	40	63	6.2	2.0	1.3
4	.84	.88	.88	1.3	1.4	1.0	2.1	40	60	5.6	1.9	1.3
5	.84	.88	.92	1.3	1.4	1.0	2.4	37	59	4.5	1.8	1.3
6	.88	.88	.96	1.3	1.3	1.1	4.4	38	59	4.3	6.9	1.3
7	.88	.88	.96	1.3	1.3	1.1	10	40	60	4.3	2.2	1.3
8	.88	.88	.96	1.3	1.3	1.2	15	46	67	3.8	2.0	1.2
9	.88	.88	.96	1.4	1.3	1.2	19	47	70	3.6	2.0	1.2
10	.88	.88	.96	1.4	1.2	1.2	13	44	58	3.5	1.9	1.2
11	.88	1.0	1.0	1.5	1.2	1.2	6.6	40	49	3.5	1.8	1.1
12	.88	1.0	1.0	1.5	1.1	1.2	7.2	37	43	3.2	1.8	1.1
13	.88	1.1	1.0	1.4	1.1	1.3	12	34	40	2.6	1.9	1.1
14	.88	1.0	1.0	1.4	1.0	1.4	26	30	37	2.4	1.9	1.0
15	.88	1.0	1.0	1.5	1.0	1.5	59	29	34	2.9	2.3	1.0
16	.84	1.0	1.0	1.5	1.0	1.6	93	35	27	3.5	2.7	.96
17	.84	.96	1.3	1.6	1.0	1.5	117	44	22	3.3	2.5	.96
18	.84	.96	1.6	1.7	1.0	1.5	131	44	20	2.9	2.3	.92
19	.84	.96	1.9	1.6	1.0	1.5	111	50	22	2.7	2.4	.88
20	.84	.96	2.2	1.6	1.0	1.6	86	55	19	2.5	2.1	.84
21	.88	.96	1.9	1.6	1.0	1.7	71	62	18	3.0	1.8	.84
22	.92	.96	1.6	1.6	1.0	1.7	66	66	16	2.9	1.8	.84
23	.78	.96	1.6	1.6	1.0	1.7	60	73	12	2.8	1.8	.84
24	.80	.96	1.5	1.6	.96	1.7	52	76	11	2.7	1.6	.84
25	.78	.96	1.4	1.6	1.0	1.8	43	83	9.7	2.5	1.3	.84
26	.78	.96	1.4	1.6	1.0	2.1	37	92	7.8	2.4	1.3	.84
27	.78	.92	1.4	1.6	1.0	2.2	32	97	6.6	2.4	1.4	.88
28	.78	.84	1.4	1.6	1.0	2.6	32	92	5.6	2.3	1.3	.88
29	.78	.84	1.3	1.6	---	2.6	30	91	5.3	2.3	1.4	.88
30	.80	.84	1.3	1.5	---	2.5	27	91	5.4	2.2	1.6	.88
31	.80	---	1.3	1.5	---	2.6	---	87	---	2.2	1.6	---
TOTAL	26.08	27.86	38.38	45.9	32.06	48.3	1171.4	1706	1058.4	105.8	63.4	31.22
MEAN	.84	.93	1.24	1.48	1.15	1.56	39.0	55.0	35.3	3.41	2.05	1.04
MAX	.92	1.1	2.2	1.7	1.5	2.6	131	97	81	6.4	6.9	1.4
MIN	.78	.80	.88	1.3	.96	1.0	2.1	29	5.3	2.2	1.3	.84
AC-FT	52	55	76	91	64	96	2320	3380	2100	210	126	62

CAL YR 1978 TOTAL 1205.92 MEAN 3.30 MAX 37 MIN .60 AC-FT 2390
WTR YR 1979 TOTAL 4354.80 MEAN 11.9 MAX 131 MIN .78 AC-FT 8640

09175000 WEST NATURITA CREEK NEAR NORWOOD, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 1977 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	TEMPER-ATURE (DEG C)
OCT		
11...	1400	17.5
25...	1430	10.5
30...	1010	10.0
NOV		
16...	1340	9.0
27...	1030	5.0
DEC		
01...	1300	5.0
14...	1110	3.0
26...	1310	2.0
28...	1140	3.0
JAN		
10...	1120	3.5
30...	1320	1.0
FEB		
08...	1220	3.5
26...	1230	6.0
MAR		
07...	1105	5.0
APR		
02...	1330	5.0
13...	1115	6.0
APR		
30...	1215	10.0
MAY		
01...	0745	8.0
21...	0950	15.0
JUN		
14...	1050	16.0
25...	1000	18.0
JUL		
12...	1400	21.0
24...	1330	22.0
31...	1020	17.0
AUG		
07...	1405	23.0
16...	1300	16.0
27...	0955	14.0
SEP		
06...	1305	18.5
20...	1310	18.5

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREP-TOCOCCI FECAL, (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)
OCT										
30...	1010	.76	950	8.7	8.3	20	K9	K4	360	230
NOV										
27...	1030	1.0	900	8.5	9.9	13	K40	K15	370	240
DEC										
26...	1310	1.1	850	8.9	10.3	20	K7	K2	370	230
JAN										
30...	1320	1.4	650	8.3	11.3	16	<1	<1	390	270
FEB										
26...	1230	1.2	850	7.9	9.4	15	K2	K4	420	260
APR										
02...	1330	2.1	880	7.6	9.7	19	K4	K2	400	220
MAY										
01...	0745	31	730	8.6	9.0	21	K3	K13	300	180
21...	0950	62	740	8.4	7.7	21	<1	K8	310	190
JUN										
25...	1000	10	650	8.4	7.1	27	K16	50	260	110
JUL										
31...	1020	-2.7	830	7.9	7.3	16	57	79	350	170
AUG										
27...	0955	1.1	782	8.0	7.9	63	46	31	310	140

K BASED ON NON-IDEAL COLONY COUNT.

09175000 WEST NATURITA CREEK NEAR NORWOOD, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
OCT 30...	70	44	55	1.3	4.2	150	4	130	340	9.9
NOV 27...	75	45	52	1.2	3.6	150	8	140	310	7.5
DEC 26...	78	43	46	1.0	3.5	170	0	140	290	7.8
JAN 30...	83	44	42	.9	3.1	140	0	110	330	9.8
FEB 26...	89	47	48	1.0	3.0	190	0	160	340	9.8
APR 02...	88	44	41	.9	3.2	220	0	180	300	9.4
MAY 01...	60	36	42	1.1	3.3	150	0	120	270	7.4
21...	63	38	42	1.0	3.5	150	2	130	250	7.8
JUN 25...	59	28	27	.7	2.6	190	1	160	170	5.8
JUL 31...	79	36	34	.8	3.1	220	0	180	230	7.6
AUG 27...	69	34	33	.8	3.1	210	0	170	--	1.3

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)
OCT 30...	.3	4.0	639	605	.87	1.31	.01	.01	.30	.31
NOV 27...	.2	4.7	750	580	1.02	2.11	.01	.01	.34	.35
DEC 26...	.2	5.4	556	558	.76	1.68	.04	.01	.41	.42
JAN 30...	.2	5.6	663	587	.90	2.52	.05	.00	.44	.44
FEB 26...	.2	5.7	653	637	.89	2.12	.02	.02	.30	.32
APR 02...	.3	6.5	625	601	.85	3.66	.11	.02	.34	.36
MAY 01...	.2	4.4	500	497	.68	42.5	.00	.05	.44	.49
21...	.2	4.1	535	485	.73	90.1	.02	.03	.40	.43
JUN 25...	.2	9.3	415	397	.56	11.4	.01	.03	.39	.42
JUL 31...	.3	7.6	537	506	.73	3.91	.01	.01	.38	.39
AUG 27...	.1	7.1	191	353	.26	.57	.14	.00	.60	.60

09175000 WEST NATURITA CREEK NEAR NORWOOD, CO--Continued

DATE	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	BORON, DISSOLVED (UG/L AS B)	IRON, DISSOLVED (UG/L AS FE)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C)	PHYTOPLANKTON, TOTAL (CELLS PER ML)	PERIPHYTON BIOMASS ASH WEIGHT G/SQ M	PERIPHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M
OCT										
30...	.32	.02	.01	70	<10	6.3	.5	440	--	--
NOV										
27...	.36	.00	.01	60	20	5.7	.3	840	10.6	11.9
DEC										
26...	.46	.02	.02	50	190	6.2	.3	420	--	--
JAN										
30...	.49	.01	.01	50	30	5.7	.3	110	--	--
FEB										
26...	.34	.01	.01	50	10	8.6	.6	340	--	--
APR										
02...	.47	.02	.00	70	40	5.6	.6	1200	55.2	60.1
MAY										
01...	.49	.04	--	70	10	5.7	.4	950	--	--
21...	.45	.02	.01	60	0	7.6	.3	960	--	--
JUN										
25...	.43	.01	.01	80	30	6.6	--	140	--	--
JUL										
31...	.40	.09	.01	70	10	5.2	.2	900	--	--
AUG										
27...	.74	.01	.01	70	10	10	.4	300	--	--

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	BARIUM, DISSOLVED (UG/L AS BA)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BERYLLIUM, DISSOLVED (UG/L AS BE)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)
NOV										
27...	1030	0	--	1	--	70	--	<1	--	1
FEB										
26...	1230	0	--	0	--	0	--	0	--	1
MAY										
21...	0950	0	1	1	0	0	0	0	0	1

DATE	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, DISSOLVED (UG/L AS CU)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	LITHIUM TOTAL RECOVERABLE (UG/L AS LI)	LITHIUM DISSOLVED (UG/L AS LI)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)
NOV										
27...	--	0	--	4	0	--	0	--	40	--
FEB										
26...	--	0	--	0	0	--	3	--	40	--
MAY										
21...	0	0	0	0	0	5	0	30	30	20

DATE	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)
NOV									
27...	70	--	.0	--	0	--	0	--	1
FEB									
26...	60	--	.0	--	3	--	0	--	1
MAY									
21...	10	.0	.1	2	0	2	3	1	1

09175000 WEST NATURITA CREEK NEAR NORWOOD, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	VANADIUM, DISSOLVED (UG/L AS V)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)	GROSS ALPHA, DISSOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DISSOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DISSOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)
NOV									
27...	.0	--	4	--	--	--	--	--	--
FEB									
26...	.0	--	20	--	--	--	--	--	--
MAY									
21...	.0	20	10	<7.7	<.4	7.6	<.4	7.0	<.4

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT					
30...	1010	.76	4	.01	--
NOV					
27...	1030	1.0	9	.03	88
DEC					
26...	1310	1.1	14	.04	85
JAN					
30...	1320	1.4	31	.12	--
FEB					
26...	1230	1.2	1	.00	--
APR					
02...	1330	2.1	37	.22	89
MAY					
01...	0745	31	7	.60	100
21...	0950	62	21	3.5	70
JUN					
25...	1000	10	8	.22	65
JUL					
31...	1020	2.7	1	<.01	--

09175000 WEST NATURITA CREEK NEAR NORWOOD, CO--Continued

PHYTOPLANKTON ANALYSIS, OCTOBER 1978 TO AUGUST 1979

DATE	OCT 30,78	NOV 27,78	DEC 26,78	JAN 30,79	FEB 26,79	APR 2,79
TIME	1010	1030	1310	1320	1230	1330
TOTAL CELLS/ML	440	840	420	110	340	1200
DIVERSITY: DIVISION	0.0	1.1	0.8	0.0	0.6	0.6
.CLASS	0.0	1.1	0.8	0.0	0.6	0.6
..ORDER	0.0	1.1	0.8	0.6	0.6	0.7
...FAMILY	1.8	2.5	1.3	2.4	2.4	3.1
....GENUS	2.0	2.8	1.3	2.4	2.5	3.2

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)												
.CHLOROPHYCEAE												
..CHLOROCOCCALES												
...CHARACIACEAE												
....SCHROEDERIA	--	-	--	-	--	-	--	-	--	-	--	-
...OOCYSTACEAE												
....ANKISTRODESMUS	--	-	--	-	--	-	--	-	--	-	--	-
....OOCYSTIS	--	-	--	-	--	-	--	-	--	-	--	-
...SCENEDESMACEAE												
....ACTINASTRUM	--	-	--	-	--	-	--	-	--	-	--	-
....SCENEDESMUS	--	-	--	-	--	-	--	-	--	-	--	-
..VOLVOCALES												
...CHLAMYDOMONADACEAE												
....CHLAMYDOMONAS	--	-	--	-	--	-	--	-	--	-	9	1
CHRYSOPHYTA												
.BACILLARIOPHYCEAE												
..CENTRALES												
...COSCINODISCACEAE												
....CYCLOTELLA	--	-	--	-	--	-	15	14	--	-	28	2
....STEPHANODISCUS	--	-	--	-	--	-	--	-	--	-	--	-
....THALASSIOSIRA	--	-	--	-	--	-	--	-	--	-	--	-
..PENNALES												
...ACHNANTHACEAE												
....ACHNANTHES	--	-	22	3	8	2	--	-	--	-	--	-
....COCCONEIS	22	5	89	11	--	-	--	-	5	1	47	4
....RHOICOSPHENIA	110#	25	110	13	--	-	10	10	--	-	9	1
...CYMBELLACEAE												
....AMPHORA	--	-	--	-	--	-	--	-	15	4	--	-
....CYMBELLA	--	-	44	5	--	-	--	-	15	4	28	2
....EPITHEMIA	22	5	--	-	--	-	--	-	--	-	--	-
...DIATOMACEAE												
....DIATOMA	110#	25	110	13	15	4	5	5	100#	30	310#	25
...FRAGILARIACEAE												
....ASTERIONELLA	--	-	--	-	--	-	--	-	--	-	--	-
....FRAGILARIA	--	-	--	-	--	-	15	14	5	1	75	6
....SYNEDRA	--	-	--	-	--	-	--	-	--	-	9	1
...GOMPHONEMATACEAE												
....GOMPHONEMA	180#	40	89	11	--	-	--	-	5	1	160	13
...NAVICULACEAE												
....NAVICULA	--	-	--	-	46	11	45#	43	130#	39	180	15
...NITZSCHIACEAE												
....NITZSCHIA	--	-	89	11	31	7	10	10	10	3	190#	15
...SURIRELLACEAE												
....SURIRELLA	--	-	--	-	8	2	5	5	15	4	75	6
CRYPTOPHYTA (CRYPTOMONADS)												
.CRYPTOPHYCEAE												
..CRYPTOMONADALES												
...CRYPTOMONADACEAE												
....CRYPTOMONAS	--	-	--	-	--	-	--	-	--	-	9	1
CYANOPHYTA (BLUE-GREEN ALGAE)												
.CYANOPHYCEAE												
..CHROOCOCCALES												
...CHROOCOCCACEAE												
....ANACYSTIS	--	-	--	-	--	-	--	-	--	-	--	-
..HORMOGONALES												
...NOSTOCACEAE												
....ANABAENA	--	-	--	-	--	-	--	-	25	7	75	6
...OSCILLATORIACEAE												
....OSCILLATORIA	--	-	270#	32	310#	74	--	-	--	-	--	-
....SCHIZOTHRIX	--	-	--	-	--	-	--	-	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)												
.EUGLENOPHYCEAE												
..EUGLENALES												
...EUGLENACEAE												
....EUGLENA	--	-	--	-	--	-	--	-	--	-	--	-
....TRACHELOMONAS	--	-	22	3	--	-	--	-	5	1	19	2
PYRRHOPHYTA (FIRE ALGAE)												
.DINOPHYCEAE												
..PERIDINIALES												
...GLENODINIACEAE												
....GLENODINIUM	--	-	--	-	--	-	--	-	5	1	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

09175000 WEST NATURITA CREEK NEAR NORWOOD, CO--Continued

PHYTOPLANKTON ANALYSIS, OCTOBER 1978 TO AUGUST 1979

DATE TIME	MAY 1,79 0745	MAY 21,79 0950	JUN 25,79 1000	JUL 31,79 1020	AUG 27,79 0955
TOTAL CELLS/ML	950	960	140	900	300
DIVERSITY: DIVISION	1.5	0.7	1.3	0.7	1.1
.CLASS	1.5	0.7	1.3	0.7	1.1
..ORDER	1.7	1.6	1.3	0.8	1.4
...FAMILY	2.0	2.2	1.7	0.8	2.5
....GENUS	2.3	2.6	1.7	0.9	2.8

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)										
.CHLOROPHYCEAE										
..CHLOROCOCCALES										
...CHARACIACEAE										
....SCHROEDERIA	--	-	13	1	--	-	--	-	--	-
...OOCYSTACEAE										
....ANKISTRODESMUS	100	11	39	4	--	-	13	1	5	2
....OOCYSTIS	130	14	--	-	--	-	--	-	--	-
...SCENEDESMACEAE										
....ACTINASTRUM	--	-	--	-	52#	36	--	-	--	-
....SCENEDESMUS	130	14	--	-	--	-	--	-	--	-
..VOLVOCALES										
...CHLAMYDOMONADACEAE										
....CHLAMYDOMONAS	29	3	39	4	--	-	--	-	--	-
CHRYSOPHYTA										
.BACILLARIOPHYCEAE										
..CENTRALES										
...COSCINODISCACEAE										
....CYCLOTELLA	130	14	90	9	--	-	65	7	--	-
....STEPHANODISCUS	--	-	210#	22	--	-	--	-	--	-
....THALASSIOSIRA	--	-	--	-	--	-	--	-	20	7
..PENNALES										
...ACHNANTHACEAE										
....ACHNANTHES	--	-	--	-	--	-	--	-	10	3
....COCCONEIS	--	-	--	-	--	-	--	-	10	3
....RHOICOSPHENIA	--	-	--	-	--	-	13	1	40	13
...CYMBELLACEAE										
....AMPHORA	--	-	--	-	--	-	--	-	--	-
....CYMBELLA	--	-	--	-	--	-	26	3	--	-
....EPITHEMIA	--	-	--	-	--	-	13	1	--	-
...DIATOMACEAE										
....DIATOMA	--	-	--	-	--	-	--	-	10	3
...FRAGILARIACEAE										
....ASTERIONELLA	--	-	260#	27	--	-	--	-	--	-
....FRAGILARIA	--	-	--	-	--	-	--	-	--	-
....SYNEDRA	--	-	13	1	--	-	--	-	--	-
...GOMPHONEMATACEAE										
....GOMPHONEMA	--	-	--	-	--	-	--	-	--	-
...NAVICULACEAE										
....NAVICULA	14	2	--	-	13	9	--	-	45	15
...NITZSCHIACEAE										
....NITZSCHIA	--	-	260#	27	65#	45	--	-	70#	23
...SURIRELLACEAE										
....SURIRELLA	--	-	--	-	--	-	--	-	--	-
CRYPTOPHYTA (CRYPTOMONADS)										
.CRYPTOPHYCEAE										
..CRYPTOMONADALES										
...CRYPTOMONADACEAE										
....CRYPTOMONAS	--	-	13	1	--	-	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)										
.CYANOPHYCEAE										
..CHROOCOCCALES										
...CHROOCOCCACEAE										
....ANACYSTIS	--	-	--	-	13	9	--	-	--	-
..HORMOGONALES										
...NOSTOCACEAE										
....ANABAENA	--	-	--	-	--	-	--	-	--	-
...OSCILLATORIACEAE										
....OSCILLATORIA	--	-	--	-	--	-	770#	86	--	-
....SCHIZOTHRIX	--	-	--	-	--	-	--	-	86#	28
EUGLENOPHYTA (EUGLENOIDS)										
.EUGLENOPHYCEAE										
..EUGLENALES										
...EUGLENACEAE										
....EUGLENA	--	-	13	1	--	-	--	-	--	-
....TRACHELOMONAS	420#	44	13	1	--	-	--	-	5	2
PYRRHOPHYTA (FIRE ALGAE)										
.DINOPHYCEAE										
..PERIDINIALES										
...GLENODINIACEAE										
....GLENODINIUM	--	-	--	-	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM: EQUAL TO OR GREATER THAN 15%
 * - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED: LESS THAN 1/2%

09175200 LILYLANDS CANAL NEAR NORWOOD, CO

LOCATION.--Lat 38°01'24", long 108°23'18", in SW¼SW¼ sec.35, T.44 N., R.14 W., San Miguel County, Hydrologic Unit 14030003, on left bank 500 ft (150 m) north of Uncompangre National Forest Boundary and 8.5 mi (13.7 km) southwest of Norwood.

PERIOD OF RECORD.--May 1975 to current year (irrigation season only).

GAGE.--Water-stage recorder. Altitude of gage is 7,940 ft (2,420 m), from topographic map.

REMARKS.--Records good. Lilyland Canal diverts water from Naturita Creek and tributaries for irrigation of 500 acres (2.02 km²) east of Dry Creek basin. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 44 ft³/s (1.25 m³/s) May 22, 1976; no flow many days each year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							.00	13	25	18	6.2	.00
2							.00	16	24	18	5.5	.00
3							.20	13	24	18	5.0	.00
4							.50	11	28	13	4.4	.00
5							4.0	19	25	12	4.0	.00
6							10	22	26	12	3.8	.00
7							13	24	32	12	3.4	.00
8							16	22	36	12	3.0	.00
9							20	19	36	12	2.8	.00
10							17	18	33	12	2.6	.00
11							7.5	16	31	12	2.4	.00
12							5.5	16	32	12	2.2	.00
13							5.5	17	32	12	2.0	.00
14							10	24	28	11	1.8	.00
15							24	29	28	9.0	1.6	.00
16							38	32	28	7.8	1.4	.00
17							36	32	28	7.9	1.2	.00
18							26	34	28	7.5	1.0	.00
19							18	35	29	7.4	.80	.00
20							13	31	29	7.6	.60	.00
21							12	29	29	7.6	.40	.00
22							15	30	29	7.6	.20	.00
23							16	30	29	7.5	.00	.00
24							20	30	29	7.3	.00	.00
25							13	30	29	7.3	.00	.00
26							9.8	28	22	7.3	.00	.00
27							8.7	30	19	7.0	.00	.00
28							14	29	18	6.8	.00	.00
29							15	31	18	6.7	.00	.00
30							12	28	18	6.4	.00	.00
31							---	26	---	6.2	.00	---
TOTAL							399.70	764	822	310.9	56.30	.00
MEAN							13.3	24.6	27.4	10.0	1.82	.000
MAX							38	35	36	18	6.2	.00
MIN							.00	11	18	6.2	.00	.00
AC-FT							793	1520	1630	617	112	.00

09175400 MAVERICK DRAW NEAR NORWOOD, CO

LOCATION.--Lat 38°10'32", long 108°19'52", in SW¼SW¼ sec.5, T.45 N., R.13 W., Montrose County, Hydrologic Unit 14030003, on left bank 2.0 mi (3.2 km) upstream from Smugglers ditch headgate and 3.5 mi (5.6 km) northwest of Norwood.

DRAINAGE AREA.--41.3 mi² (107.0 km²).

PERIOD OF RECORD.--April 1975 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,660 ft (2,030 m), from topographic map.

REMARKS.--Records good. Natural flow of stream affected by diversions for irrigation of 72 acres (291,000 m²) above station and 35 acres (142,000 m²) below. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 107 ft³/s (3.03 m³/s) June 9, 1979, gage height, 4.43 ft (1.350 m); minimum daily, 0.03 ft³/s (0.001 m³/s) Aug. 29, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 107 ft³/s (3.03 m³/s) at 0430 June 9, gage height, 4.43 ft (1.350 m); minimum daily, 0.22 ft³/s (0.006 m³/s) Oct. 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AJG	SEP
1	.40	.70	.64	1.3	1.4	6.6	9.5	1.8	19	20	6.1	3.0
2	.40	.76	1.2	1.3	1.3	6.5	8.5	1.6	16	20	7.5	2.8
3	.40	1.2	1.2	1.3	1.3	6.3	8.7	2.0	10	19	6.5	2.7
4	.40	1.8	1.2	1.2	1.4	6.1	7.4	2.3	8.7	22	6.1	2.6
5	.32	1.8	1.4	1.2	1.5	5.7	6.0	2.5	7.5	22	6.1	2.9
6	.30	1.8	1.3	1.3	1.8	6.1	5.7	2.5	8.3	23	6.6	2.9
7	.25	1.6	1.2	1.3	1.8	7.3	5.5	2.4	16	26	7.3	2.3
8	.22	1.6	.92	1.5	1.8	9.5	5.5	2.8	60	20	7.2	2.4
9	.32	1.8	.86	1.6	2.0	8.3	5.4	3.7	83	18	7.2	2.6
10	.32	1.7	1.7	1.5	1.8	6.8	6.6	4.0	35	17	6.1	2.6
11	.56	1.9	1.5	1.4	1.8	6.5	6.6	3.4	26	14	5.5	2.6
12	2.3	4.2	1.2	1.4	1.7	8.2	6.8	3.4	18	13	5.2	2.5
13	.56	2.0	.98	1.4	2.1	9.5	7.3	3.8	16	12	5.5	1.9
14	.44	1.3	.86	1.4	2.6	11	7.0	2.9	16	10	6.0	1.8
15	.70	1.2	.76	1.4	2.6	14	5.4	3.0	17	9.7	6.3	1.9
16	.70	1.0	.72	1.4	3.0	13	5.1	3.6	15	9.5	6.5	1.6
17	.70	.86	.72	1.3	3.2	12	7.7	5.7	14	9.7	6.0	2.0
18	.70	.80	.80	1.3	3.1	9.1	9.7	5.7	14	9.3	5.4	1.8
19	.70	.76	.80	1.4	3.2	7.9	7.5	5.4	17	9.7	9.3	1.7
20	.80	.76	.90	1.3	3.4	7.7	5.4	6.6	17	10	8.3	1.7
21	.90	.68	1.0	1.3	3.9	9.5	4.4	7.5	14	12	5.7	1.6
22	1.3	.60	1.0	1.3	4.4	7.5	4.0	8.3	16	11	4.0	1.4
23	1.2	.68	1.1	1.4	5.0	7.3	3.9	10	15	10	3.8	1.6
24	1.0	.68	1.2	1.4	5.1	8.1	3.4	14	15	8.7	3.4	1.7
25	1.0	.68	1.2	1.4	5.4	8.3	3.0	17	16	8.3	3.2	1.8
26	1.1	.60	1.2	1.3	6.0	7.9	2.9	18	19	7.5	3.1	2.1
27	.90	.44	1.2	1.3	6.1	8.1	2.0	20	20	6.3	3.3	2.3
28	.90	.60	1.2	1.2	6.1	9.3	2.5	19	20	7.0	2.8	2.4
29	.80	.38	1.2	1.3	---	10	2.1	24	20	7.3	2.6	2.8
30	.70	.48	1.2	1.3	---	8.9	1.9	21	19	6.6	2.8	1.7
31	.70	---	1.2	1.3	---	9.1	---	19	---	6.0	3.3	---
TOTAL	21.99	35.36	33.56	41.7	84.8	262.1	167.4	246.9	607.5	404.6	168.7	65.7
MEAN	.71	1.18	1.08	1.35	3.03	8.45	5.58	7.96	20.3	13.1	5.44	2.19
MAX	2.3	4.2	1.7	1.6	6.1	14	9.7	24	83	26	9.3	3.0
MIN	.22	.38	.64	1.2	1.3	5.7	1.9	1.6	7.5	6.0	2.6	1.4
AC-FT	44	70	67	83	168	520	332	490	1200	803	335	130

CAL YR 1978 TOTAL 604.77 MEAN 1.66 MAX 7.2 MIN .22 AC-FT 1200
WTR YR 1979 TOTAL 2140.31 MEAN 5.86 MAX 83 MIN .22 AC-FT 4250

09175500 SAN MIGUEL RIVER AT NATURITA, CO

LOCATION.--Lat 38°13'04", long 108°33'57", in NE¼NW¼ sec.30, T.46 N., R.15 W., Montrose County, Hydrologic Unit 14030003, on left bank 20 ft (6 m) downstream from bridge on State Highway 97 in Naturita and 1.2 mi (1.9 km) downstream from Naturita Creek.

DRAINAGE AREA.--1,069 mi² (2,769 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1917 to September 1929, May 1940 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WRD Colo. 1972: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 5,392.85 ft (1,643.74 m), National Geodetic Vertical Datum of 1929. Apr. 26, 1918, to Sept. 2, 1926, nonrecording gage, and Sept. 3, 1926, to Sept. 30, 1929, water-stage recorder, at same site at different datums. Oct. 1, 1940, to Dec. 9, 1941, nonrecording gage at presant site and datum.

COOPERATION.--Records collected and computed by Colorado Division of Water Resources and reviewed by Geological Survey.

REMARKS.--Records good except those for winter period, which are poor. Natural flow of stream affected by storage reservoirs, diversions for irrigation of about 22,000 acres (89.0 km²) above station and 4,000 acres (16.2 km²) below, and return flow from irrigated areas.

AVERAGE DISCHARGE.--51 years (water years 1918-29, 1941-79), 331 ft³/s (9.374 m³/s), 239,800 acre-ft/yr (296 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,100 ft³/s (201 m³/s) Apr. 15, 1942, gage height, 9.80 ft (2.987 m), from rating curve extended above 3,800 ft³/s (110 m³/s); minimum daily, 1.6 ft³/s (0.045 m³/s) July 16, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,360 ft³/s (152 m³/s) at 2330 Apr. 18, gage height, 7.55 ft (2.332 m), only peak above base of 1,800 ft³/s (51 m³/s); minimum daily, 7.1 ft³/s (0.201 m³/s) Oct. 13, 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	75	83	90	90	103	121	1510	1690	1210	289	73
2	7.9	79	96	40	90	91	110	1500	1460	1270	268	46
3	7.5	104	82	60	90	93	108	1210	1320	1220	244	38
4	9.1	85	72	70	80	83	108	1190	1300	1020	224	34
5	11	82	80	90	70	80	106	1270	1380	842	206	32
6	12	79	78	100	80	93	125	1420	1860	824	208	34
7	12	76	77	100	80	110	216	1340	2150	819	206	30
8	12	73	62	80	80	125	348	1180	2330	902	211	33
9	10	72	65	90	80	127	530	1000	2030	860	208	37
10	10	72	70	90	80	103	630	908	1540	836	193	34
11	9.1	75	70	95	90	101	393	797	1200	814	159	36
12	8.7	123	75	100	90	104	277	902	1310	775	139	30
13	7.1	117	75	100	100	108	250	968	1770	720	193	30
14	7.5	88	75	90	100	113	354	884	2020	726	169	28
15	7.1	83	75	100	100	133	783	968	2120	675	193	30
16	11	75	75	110	100	123	1550	1040	2140	588	190	30
17	17	64	85	110	100	123	2440	1080	1910	616	222	27
18	60	40	90	110	100	113	3230	1160	1600	588	176	24
19	65	23	100	110	100	108	3050	1380	1220	544	188	29
20	65	22	100	110	100	113	2060	1470	980	498	171	25
21	69	23	95	100	100	133	2090	1620	920	503	152	24
22	112	27	95	95	100	129	2680	1660	1080	512	129	26
23	97	76	100	90	99	115	3150	1810	1180	473	113	26
24	93	70	100	90	96	113	2850	1680	1230	445	133	25
25	101	82	95	100	91	115	2130	1740	1210	437	96	22
26	101	79	95	100	99	121	1560	1720	1240	401	89	24
27	86	75	90	90	115	127	1340	2070	1280	373	89	24
28	80	66	95	90	108	121	1760	2290	1300	369	79	25
29	79	65	100	90	---	131	1720	2260	1290	362	79	26
30	77	82	100	80	---	121	1440	2210	1180	365	77	29
31	76	---	100	80	---	123	---	1880	---	309	93	---
TOTAL	1330.0	2152	2650	2850	2608	3496	37509	44117	45240	20896	5156	931
MEAN	42.9	71.7	85.5	91.9	93.1	113	1250	1423	1508	674	166	31.0
MAX	112	123	100	110	115	133	3230	2290	2330	1270	289	73
MIN	7.1	22	62	40	70	80	106	797	920	309	77	22
AC-FT	2640	4270	5260	5650	5170	6930	74400	87510	89730	41450	10230	1850

CAL YR 1978 TOTAL 113800.7 MEAN 312 MAX 1590 MIN 6.7 AC-FT 225700
WTR YR 1979 TOTAL 168935.0 MEAN 463 MAX 3230 MIN 7.1 AC-FT 335100

09175500 SAN MIGUEL RIVER AT NATURITA, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 1977 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	TEMPER-ATURE (DEG C)
OCT		
11...	1120	12.0
25...	1050	10.0
30...	1320	9.0
NOV		
16...	1035	4.5
27...	1230	3.0
27...	1350	4.0
DEC		
01...	1505	4.0
14...	1515	2.0
27...	0630	.0
28...	1430	1.5
JAN		
10...	1440	1.0
25...	1330	1.0
30...	1700	1.0
FEB		
08...	1625	2.0
26...	1430	5.5
MAR		
07...	1440	8.0
28...	1145	7.0
APR		
02...	1630	7.0
13...	1445	10.0
30...	1130	10.0
30...	1525	8.0
MAY		
21...	1250	13.0
JUN		
25...	1325	14.0
JUL		
12...	1010	14.0
24...	1045	17.0
31...	1345	21.0
AUG		
07...	1135	20.0
16...	1010	16.0
27...	1330	20.0
SEP		
06...	1040	15.5
20...	1045	14.0

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREP-TOCOCCI FECAL, (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)
OCT										
30...	1320	85	750	8.5	9.6	13	K1	K30	350	230
NOV										
27...	1230	80	760	8.4	--	--	--	--	350	210
27...	1350	78	800	8.6	10.8	3	K30	K30	330	200
DEC										
27...	0630	65	850	8.7	11.8	14	K18	K34	370	230
JAN										
30...	1700	65	680	8.5	11.7	5	<1	K10	310	170
FEB										
26...	1430	85	540	7.8	10.5	6	K10	44	320	200
APR										
02...	1630	112	940	7.4	10.0	12	<1	K37	410	240
30...	1130	1290	280	8.4	9.3	22	K10	K27	120	42
MAY										
21...	1250	1670	320	8.2	8.7	33	K17	64	140	65
JUN										
25...	1325	1320	300	8.0	8.5	23	K16	60	120	54
JUL										
31...	1345	295	420	7.7	7.4	6	K20	27	170	91
AUG										
27...	1330	110	750	8.1	7.6	63	28	31	310	190

K BASED ON NON-IDEAL COLONY COUNT.

09175500 SAN MIGUEL RIVER AT NATURITA, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	ALKA- LINITY (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
OCT 30...	99	24	23	.5	2.2	140	3	120	260	5.7
NOV 27...	96	27	27	.6	1.9	160	4	140	270	7.0
27...	89	26	26	.6	2.0	140	6	120	280	7.6
DEC 27...	100	30	31	.7	2.1	170	0	140	300	8.6
JAN 30...	84	25	27	.7	2.0	150	10	140	230	7.1
FEB 26...	90	23	24	.6	1.6	140	0	110	240	6.6
APR 02...	98	39	41	.9	2.6	200	0	160	320	13
30...	33	8.0	7.8	.3	2.1	89	0	73	50	2.4
MAY 21...	42	9.0	9.3	.3	1.5	94	0	77	65	2.3
JUN 25...	34	7.5	11	.4	.9	75	0	62	64	1.9
JUL 31...	48	11	11	.4	1.4	90	0	74	120	2.8
AUG 27...	81	25	26	.6	2.1	140	0	110	260	6.1

DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)
OCT 30...	.3	8.9	508	495	.69	117	.02	.00	.20	.20
NOV 27...	.3	8.4	--	521	.71	113	--	--	--	--
27...	.3	8.2	527	514	.72	111	.10	.01	.18	.19
DEC 27...	.3	9.6	603	565	.82	106	.19	.01	.15	.16
JAN 30...	.2	8.3	465	468	.63	81.6	.16	.01	.08	.09
FEB 26...	.2	8.7	478	463	.65	110	.15	.02	.15	.17
APR 02...	.4	8.0	666	621	.91	201	.01	.02	.16	.18
30...	.1	7.8	181	155	.25	630	.39	.00	.21	.21
MAY 21...	.2	6.7	202	182	.27	911	.25	.04	.74	.78
JUN 25...	.2	8.3	172	165	.23	613	.10	.02	.24	.26
JUL 31...	.7	7.1	254	246	.35	202	.03	.01	.11	.12
AUG 27...	.4	8.5	758	478	1.03	225	.25	.07	.03	.10

09175500 SAN MIGUEL RIVER AT NATURITA, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	BORON, DISSOLVED (UG/L AS B)	IRON, DISSOLVED (UG/L AS FE)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	CARBON ORGANIC SUSPENDED TOTAL (MG/L AS C)	PHYTOPLANKTON, TOTAL (CELLS PER ML)	PERIPHYTON BIOMASS ASH WEIGHT G/SQ M	PERIPHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M
OCT 30...	.22	.01	.01	50	10	.3	.2	370	--	--
NOV 27...	--	--	.00	--	<1	--	--	--	--	--
27...	.29	.00	.01	70	10	2.8	.5	43	11.1	12.1
DEC 27...	.35	.03	.03	60	10	2.4	.3	720	--	--
JAN 30...	.25	.00	.00	80	60	1.9	.4	48	--	--
FEB 26...	.32	.01	.01	60	20	2.8	.9	510	--	--
APR 02...	.19	.01	.01	80	0	3.6	.6	1200	.870	1.02
30...	.60	.08	--	50	40	7.0	--	43	--	--
MAY 21...	1.0	.16	.01	40	10	6.6	1.0	4500	--	--
JUN 25...	.36	.06	.01	170	40	3.9	--	77	--	--
JUL 31...	.15	.09	.01	60	10	3.6	.1	130	--	--
AUG 27...	.35	.07	.00	70	10	3.7	.5	900	--	--

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	BARIUM, DISSOLVED (UG/L AS BA)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BERYLLIUM, DISSOLVED (UG/L AS BE)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)
NOV 27...	1230	--	--	--	--	--	--	--	--	--
27...	1350	0	--	1	--	60	--	<1	--	1
FEB 26...	1430	0	--	1	--	0	--	0	--	1
MAY 21...	1250	20	3	1	200	0	0	0	2	3

DATE	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, DISSOLVED (UG/L AS CU)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	LITHIUM TOTAL RECOVERABLE (UG/L AS LI)	LITHIUM DISSOLVED (UG/L AS LI)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)
NOV 27...	--	--	--	--	--	--	--	--	--	--
27...	--	10	--	<3	0	--	1	--	30	--
FEB 26...	--	10	--	0	3	--	1	--	30	--
MAY 21...	10	0	4	0	2	78	3	8	4	400

DATE	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)
NOV 27...	30	--	--	--	--	--	--	--	--
27...	30	--	.0	--	0	--	0	--	2
FEB 26...	30	--	.0	--	3	--	0	--	1
MAY 21...	20	.1	.0	0	0	7	3	0	1

09175500 SAN MIGUEL RIVER AT NATURITA, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	VANADIUM, DISSOLVED (UG/L AS V)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)	GROSS ALPHA, DISSOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DISSOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DISSOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)
NOV									
27...	--	--	--	--	--	--	--	--	--
27...	1.0	--	20	--	--	--	--	--	--
FEB									
26...	.1	--	50	--	--	--	--	--	--
MAY									
21...	.0	300	20	<2.8	14	2.5	9.0	2.3	8.5

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT					
30...	1320	85	5	1.1	--
NOV					
27...	1350	78	12	2.5	58
DEC					
27...	0630	65	7	1.2	85
JAN					
30...	1700	65	9	1.6	--
FEB					
26...	1430	85	38	8.7	74
APR					
02...	1630	112	21	6.4	91
30...	1130	1290	105	366	66
MAY					
21...	1250	1670	140	631	95
JUN					
25...	1325	1320	141	503	70
AUG					
27...	1330	110	35	10	--

09175500 SAN MIGUEL RIVER AT NATURITA, CO--Continued

PHYTOPLANKTON ANALYSES, OCTOBER 1978 TO AUGUST 1979

DATE	OCT 30,78		NOV 27,78		DEC 27,78		JAN 30,79		FEB 26,79		APR 2,79	
TIME	1320		1350		0630		1700		1430		1630	
TOTAL CELLS/ML	370		43		720		48		510		1200	
DIVERSITY: DIVISION	0.0		0.0		0.6		0.9		1.2		0.8	
.CLASS	0.0		0.0		0.6		0.9		1.2		0.8	
..ORDER	0.0		0.0		0.7		0.9		1.8		1.1	
...FAMILY	2.4		0.9		0.9		2.2		3.2		3.2	
....GENUS	2.7		0.9		0.9		2.2		3.2		3.3	
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)												
.CHLOROPHYCEAE												
..CHLOROCOCCALES												
...MICRACTINIACEAE												
....GOLENKINIA	--	-	--	-	--	-	--	-	--	-	--	-
...OOCYSTACEAE												
....ANKISTRODESMUS	--	-	--	-	--	-	--	-	5	1	--	-
....TREUBARIA	--	-	--	-	8	1	--	-	--	-	--	-
...SCENEDESMACEAE												
....SCENEDESMUS	--	-	--	-	--	-	--	-	40	8	38	3
..VOLVOCALES												
...CHLAMYDOMONADACEAE												
....CHLAMYDOMONAS	--	-	--	-	--	-	13#	28	--	-	--	-
CHRYSOPHYTA												
.BACILLARIOPHYCEAE												
..CENTRALES												
...COSCINODISCACEAE												
....CYCLOTELLA	--	-	--	-	--	-	--	-	76	15	57	5
..PENNALES												
...ACHNANTHACEAE												
....ACHNANTHES	22	6	--	-	--	-	--	-	--	-	--	-
....COCCONEIS	--	-	--	-	--	-	--	-	5	1	28	2
....RHOICOSPHENIA	--	-	--	-	--	-	--	-	--	-	19	2
...CYMBELLACEAE												
....AMPHORA	--	-	--	-	--	-	--	-	--	-	--	-
....CYMBELLA	44	12	--	-	--	-	3	6	66	13	140	12
....EPITHEMIA	22	6	--	-	--	-	--	-	--	-	--	-
...DIATOMACEAE												
....DIATOMA	88#	24	--	-	--	-	--	-	--	-	9	1
...FRAGILARIACEAE												
....FRAGILARIA	--	-	--	-	--	-	--	-	35	7	94	8
....SYNEDRA	--	-	--	-	15	2	--	-	--	-	9	1
...GOMPHONEMATACEAE												
....GOMPHONEMA	--	-	--	-	--	-	3	6	10	2	85	7
...NAVICULACEAE												
....AMPHIPLEURA	22	6	--	-	--	-	--	-	--	-	--	-
....NAVICULA	88#	24	14#	33	39	5	13#	28	35	7	230#	18
...NITZSCHIACEAE												
....HANTZSCHIA	--	-	--	-	--	-	--	-	--	-	28	2
....NITZSCHIA	66#	18	29#	67	31	4	13#	28	120#	23	140	12
...SURIRELLACEAE												
....SURIRELLA	22	6	--	-	--	-	3	6	30	6	160	13
CRYPTOPHYTA (CRYPTOMONADS)												
.CRYPTOPHYCEAE												
..CRYPTOMONADALES												
...CRYPTOMONADACEAE												
....CRYPTOMONAS	--	-	--	-	--	-	--	-	5	1	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)												
.CYANOPHYCEAE												
..CHROOCOCCALES												
...CHROOCOCCACEAE												
....ANACYSTIS	--	-	--	-	15	2	--	-	81#	16	--	-
..HORMOGONALES												
...OSCILLATORIACEAE												
....LYNGBYA	--	-	--	-	--	-	--	-	--	-	--	-
....OSCILLATORIA	--	-	--	-	620#	85	--	-	--	-	190#	15
EUGLENOPHYTA (EUGLENOIDS)												
.EUGLENOPHYCEAE												
..EUGLENALES												
...EUGLENACEAE												
....TRACHELOMONAS	--	-	--	-	--	-	--	-	10	2	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

09175500 SAN MIGUEL RIVER AT NATURITA, CO--Continued

PHYTOPLANKTON ANALYSES, OCTOBER 1978 TO AUGUST 1979

DATE	APR 30,79		MAY 21,79		JUN 25,79		JUL 31,79		AUG 27,79	
TIME	1130		1250		1325		1345		1330	
TOTAL CELLS/ML	43		4500		77		130		900	
DIVERSITY: DIVISION	0.0		0.2		1.0		0.5		0.2	
.CLASS	0.0		0.2		1.0		0.5		0.2	
..ORDER	0.0		0.2		1.5		0.5		0.4	
...FAMILY	1.6		0.3		1.8		2.2		2.6	
....GENUS	1.6		1.2		1.8		2.4		3.0	
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)										
.CHLOROPHYCEAE										
..CHLOROCOCCALES										
...MICRACTINIACEAE										
....GOLENKINIA	--	-	--	-	39#	50	--	-	--	-
...OOCYSTACEAE										
....ANKISTRODESMUS	--	-	--	-	--	-	--	-	--	-
....TREUBARIA	--	-	--	-	--	-	--	-	--	-
...SCENEDESMACEAE										
....SCENEDESMUS	--	-	--	-	--	-	--	-	26	3
..VOLVOCALES										
...CHLAMYDOMONADACEAE										
....CHLAMYDOMONAS	--	-	--	-	--	-	13	10	7	1
CHRYSOPHYTA										
.BACILLARIOPHYCEAE										
..CENTRALES										
...COSCINODISCACEAE										
....CYCLOTELLA	--	-	--	-	13#	17	--	-	20	2
..PENNALES										
...ACHNANTHACEAE										
....ACHNANTHES	14#	33	--	-	--	-	26#	20	220#	25
....COCCONEIS	--	-	--	-	--	-	13	10	52	6
....RHOICOSPHENIA	--	-	--	-	--	-	--	-	13	1
...CYMBELLACEAE										
....AMPHORA	--	-	--	-	--	-	--	-	7	1
....CYMBELLA	14#	33	--	-	--	-	13	10	39	4
....EPITHEMIA	--	-	--	-	--	-	--	-	--	-
...DIATOMACEAE										
....DIATOMA	--	-	--	-	--	-	--	-	--	-
...FRAGILARIACEAE										
....FRAGILARIA	--	-	--	-	13#	17	39#	30	13	1
....SYNEDRA	--	-	--	-	--	-	--	-	150#	17
...GOMPHONEMATACEAE										
....GOMPHONEMA	--	-	52	1	--	-	--	-	13	1
...NAVICULACEAE										
....AMPHIPLEURA	--	-	--	-	--	-	--	-	--	-
....NAVICULA	--	-	52	1	13#	17	--	-	72	8
...NITZSCHIACEAE										
....HANTZSCHIA	--	-	--	-	--	-	--	-	--	-
....NITZSCHIA	14#	33	--	-	--	-	26#	20	220#	25
...SURIRELLACEAE										
....SURIRELLA	--	-	52	1	--	-	--	-	46	5
CRYPTOPHYTA (CRYPTOMONADS)										
.CRYPTOPHYCEAE										
..CRYPTOMONADALES										
...CRYPTOMONADACEAE										
....CRYPTOMONAS	--	-	--	-	--	-	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)										
.CYANOPHYCEAE										
..CHROOCOCCALES										
...CHROOCOCCACEAE										
....ANACYSTIS	--	-	--	-	--	-	--	-	--	-
..HORMOGONALES										
...OSCILLATORIACEAE										
....LYNGBYA	--	-	2300#	51	--	-	--	-	--	-
....OSCILLATORIA	--	-	2100#	45	--	-	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)										
.EUGLENOPHYCEAE										
..EUGLENALES										
...EUGLENACEAE										
....TRACHELOMONAS	--	-	--	-	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM: EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED: LESS THAN 1/2%

09177000 SAN MIGUEL RIVER AT URAVAN, CO

LOCATION.--Lat 38°21'26", long 108°42'44", in SW¼NE¼ sec.2, T.47 N., R.17 W., Montrose County, Hydrologic Unit 14030003, on right bank 20 ft (6 m) downstream from bridge on State Highway 141, 400 ft (120 m) downstream from Tabeguache Creek, and 1.5 mi (2.4 km) southeast of Uravan.

DRAINAGE AREA.--1,499 mi^2 (3,882 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1954 to September 1962, October 1973 to current year.

REVISED RECORDS.--WRD Colo. 1974: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 5,000 ft (1,524 m), from topographic map. Prior to Sept. 3, 1959, at site 0.5 mi (0.8 km) downstream at different datum.

REMARKS.--Records good except those for periods of ice effect, which are poor. Natural flow of stream affected by storage reservoirs, diversions for irrigation of about 28,000 acres (113 km^2) above station, and return flow from irrigated areas.

AVERAGE DISCHARGE.--14 years (water years 1955-62, 1974-79), 330 ft^3/s (9.346 m^3/s), 239,100 acre-ft/yr (295 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,690 ft^3/s (189 m^3/s) Apr. 19, 1958, gage height, 11.75 ft (3.581 m), site and datum then in use; minimum daily, 9.4 ft^3/s (0.27 m^3/s) Aug. 10, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Sept. 6, 1970, reached a stage of 12.6 ft (3.84 m), from floodmarks, discharge, 8,910 ft^3/s (252 m^3/s), by slope-area measurement at site 5.5 mi (8.8 km) downstream.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,000 ft^3/s (57 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Apr. 19	0300	*6,310	179	8.95	2.728	June 8	1100	2,560	73.1	6.85	2.091
May 28	1000	2,760	78.2	7.02	2.140						

Minimum daily discharge 26 ft^3/s (0.736 m^3/s), Oct. 3, 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	76	90	110	110	166	146	1820	1840	1160	298	116
2	27	76	114	50	110	170	134	1860	1600	1200	283	90
3	26	118	90	80	110	136	124	1480	1460	1150	262	70
4	26	85	73	90	100	114	122	1390	1440	1020	241	61
5	27	79	80	110	90	104	120	1560	1510	835	229	59
6	29	76	90	120	100	196	130	1740	1920	800	223	55
7	30	74	90	120	100	368	212	1690	2160	795	220	50
8	31	71	95	120	100	474	348	1480	2440	850	226	48
9	31	71	100	120	100	276	518	1240	2170	810	223	55
10	31	70	100	120	100	144	634	1130	1660	775	218	50
11	30	73	95	120	100	130	450	1010	1360	770	182	55
12	29	197	95	120	110	142	324	1040	1420	715	159	50
13	29	144	95	120	120	152	301	1160	1770	670	232	48
14	31	99	90	110	120	155	380	1100	1980	670	232	48
15	32	90	90	120	120	180	781	1230	2070	630	232	46
16	35	90	90	120	120	168	1600	1370	2110	550	244	48
17	42	79	100	120	120	157	2550	1440	1920	570	256	44
18	58	67	100	120	120	138	3500	1560	1640	562	223	42
19	67	54	120	120	120	132	3790	1870	1340	514	220	42
20	67	53	120	130	128	144	2300	1970	1080	470	215	46
21	73	50	110	130	130	180	2160	2070	982	490	195	42
22	112	55	110	120	118	166	2630	2040	1170	490	172	42
23	94	80	120	120	104	142	3490	2170	1200	450	152	44
24	88	79	120	120	108	130	3720	2070	1250	426	144	44
25	95	87	120	120	130	130	2440	2130	1220	418	136	42
26	97	90	120	130	128	134	1850	2050	1250	390	134	44
27	85	82	120	130	130	144	1560	2380	1270	362	132	44
28	82	76	110	120	144	140	1830	2560	1290	362	122	44
29	76	74	120	120	---	148	1990	2500	1240	352	110	42
30	74	85	120	110	---	146	1760	2380	1150	362	114	42
31	76	---	120	110	---	140	---	2070	---	317	132	---
TOTAL	1658	2500	3207	3570	3190	5246	41894	53560	46912	19935	6131	1553
MEAN	53.5	83.3	103	115	114	169	1396	1728	1564	643	197	51.8
MAX	112	197	120	130	144	474	3790	2560	2440	1200	298	116
MIN	26	50	73	50	90	104	120	1010	982	317	110	42
AC-FT	3290	4960	6360	7080	6330	10410	83100	106200	93050	39540	12130	3080

CAL YR 1978 TOTAL 129479 MEAN 355 MAX 1850 MIN 24 AC-FT 256800
WTR YR 1979 TOTAL 189326 MEAN 519 MAX 3790 MIN 26 AC-FT 375500

09177000 SAN MIGUEL RIVER AT URAVAN, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--August 1969 to September 1979 (discontinued).

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
OCT										
30...	1440	76	1100	8.5	9.0	1.0	9.3	12	--	--
NOV										
27...	1515	79	1200	8.5	5.5	--	--	--	--	--
27...	1545	77	1100	8.6	4.0	15	10.8	5	--	--
DEC										
26...	1600	E65	1000	8.7	.0	18	12.0	12	52	K33
JAN										
30...	1615	E65	900	8.6	.0	9.0	12.2	38	--	--
FEB										
26...	1515	106	1240	8.1	2.0	42	11.5	10	--	--
APR										
03...	0705	126	1100	7.7	3.0	10	11.3	10	<1	<1
30...	1230	1730	280	8.0	11.0	87	9.3	35	--	--
MAY										
21...	1345	2030	330	8.0	14.0	150	8.7	--	--	--
JUN										
25...	1415	1270	350	8.0	19.0	42	7.9	17	--	K12
JUL										
31...	1505	331	560	8.2	23.0	--	7.3	6	--	--
AUG										
27...	1500	144	1000	8.2	22.0	.40	7.4	63	--	--

DATE	STREP-TOCOCCI FECAL, (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)
OCT										
30...	--	--	--	--	--	--	--	--	--	--
NOV										
27...	--	510	380	120	50	39	.8	2.4	150	0
27...	--	--	--	--	--	--	--	--	--	--
DEC										
26...	K28	490	340	120	46	45	.9	3.3	180	0
JAN										
30...	--	--	--	--	--	--	--	--	--	--
FEB										
26...	--	--	--	--	--	--	--	--	--	--
APR										
03...	--	520	340	120	53	54	1.0	3.2	220	0
30...	--	--	--	--	--	--	--	--	--	--
MAY										
21...	--	--	--	--	--	--	--	--	--	--
JUN										
25...	--	130	65	38	9.5	9.2	.3	1.0	--	--
JUL										
31...	--	--	--	--	--	--	--	--	--	--
AUG										
27...	--	--	--	--	--	--	--	--	--	--

K BASED ON NON-IDEAL COLONY COUNT.

09177000 SAN MIGUEL RIVER AT URAVAN, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	SOLIDS, SUSP. TOTAL, RESIDUE AT 110 DEG. C (MG/L)
OCT 30...	--	--	--	--	--	701	--	.95	144	8
NOV 27...	120	450	13	.3	7.0	--	756	1.03	161	--
27...	--	--	--	--	--	734	--	1.00	153	1
DEC 26...	150	400	9.5	--	9.4	747	722	1.02	131	59
JAN 30...	--	--	--	--	--	634	--	.86	111	27
FEB 26...	--	--	--	--	--	897	--	1.22	257	105
APR 03...	180	420	18	--	7.1	792	784	1.08	269	21
30...	--	--	--	--	--	183	--	.25	855	--
MAY 21...	--	--	--	--	--	215	--	.29	1180	--
JUN 25...	69	88	3.3	--	7.7	194	198	.26	665	284
JUL 31...	--	--	--	--	--	353	--	.48	315	8
AUG 27...	--	--	--	--	--	--	--	--	--	11

DATE	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
OCT 30...	.00	.00	.14	.14	.14	.00	--	2.2	--	--
NOV 27...	--	--	--	--	--	--	.00	--	40	70
27...	.00	.01	.21	.22	.22	.00	--	3.0	--	--
DEC 26...	.10	.01	.24	.25	.35	.07	--	3.1	--	--
JAN 30...	.19	.07	.25	.32	.51	.03	--	1.8	--	--
FEB 26...	.24	.13	.30	.43	.67	.04	--	4.4	--	--
APR 03...	.03	.04	.12	.16	.19	.02	--	3.2	--	--
30...	.35	.01	.51	.52	.87	.11	--	9.9	--	--
MAY 21...	.22	.04	1.2	1.2	1.4	.05	--	35	--	--
JUN 25...	.11	.03	.34	.37	.48	.04	--	4.3	--	--
JUL 31...	.01	.01	.10	.11	.12	.13	--	1.8	--	--
AUG 27...	.01	.03	1.9	1.9	1.9	.02	--	4.8	--	--

09177100 SAN MIGUEL RIVER BELOW URAVAN, CO

LOCATION.--Lat 38°23'08", long 108°45'28", in SW¼NW¼ sec.28, T.48 N., R.17 W., Montrose County, Hydrologic Unit 14030003, at county bridge 75 ft (23 m) downstream from Atkinson Creek and 2.0 mi (3.2 km) northwest of Uravan.

DRAINAGE AREA.--1,549 mi^2 (4,012 km^2).

PERIOD OF RECORD.--August 1969 to current year.

REMARKS.--Field data collected prior to 1974 water year are available in district office.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (NTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L)	COLIFORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, (COLS. PER 100 ML)	HARDNESS (MG/L AS CACO3)
OCT 30...	1530	75	1400	7.5	9.0	1.0	9.3	13	--	--	--	--
NOV 27...	1600	66	1350	7.9	4.0	15	10.8	4	--	--	--	--
DEC 26...	1530	65	1480	8.2	.0	16	12.0	16	--	K30	K10	580
JAN 30...	1545	64	1500	8.4	.0	10	12.2	15	--	--	--	--
FEB 26...	1530	80	1190	7.9	3.0	28	11.3	17	--	--	--	--
APR 03...	0735	108	1500	7.5	3.0	10	11.3	11	<1	<1	--	570
30...	1300	1720	300	8.1	11.0	93	9.3	27	--	--	--	--
MAY 21...	1400	1810	350	7.9	14.0	180	8.7	--	--	--	--	--
JUN 25...	1500	1280	360	8.0	19.0	33	7.9	17	--	46	--	140
JUL 31...	1440	330	600	8.0	23.0	--	7.3	8	--	--	--	--
AUG 27...	1430	110	1200	8.2	22.0	1.6	7.4	63	--	--	--	--

DATE	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SILICA, DISSOLVED (MG/L AS SIO2)
OCT 30...	--	--	--	--	--	--	--	--	--	--	--	--
NOV 27...	--	--	--	--	--	--	--	--	--	--	--	--
DEC 26...	420	130	61	96	1.7	6.5	190	0	160	520	81	9.2
JAN 30...	--	--	--	--	--	--	--	--	--	--	--	--
FEB 26...	--	--	--	--	--	--	--	--	--	--	--	--
APR 03...	390	120	66	96	1.7	6.1	220	0	180	530	65	6.8
30...	--	--	--	--	--	--	--	--	--	--	--	--
MAY 21...	--	--	--	--	--	--	--	--	--	--	--	--
JUN 25...	72	39	10	12	.4	1.2	--	--	67	94	6.3	8.0
JUL 31...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 27...	--	--	--	--	--	--	--	--	--	--	--	--

K BASED ON NON-IDEAL COLONY COUNT.

09177100 SAN MIGUEL RIVER BELOW URAVAN, CO--Continued

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	SOLIDS, SUSP. TOTAL, RESIDUE AT 110 DEG. C (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT												
30...	937	--	1.27	190	14	.64	4.1	.40	4.5	5.1	.01	3.3
NOV												
27...	993	--	1.35	177	14	.59	2.9	.50	3.4	4.0	.01	3.1
DEC												
26...	1070	997	1.46	188	69	1.0	6.1	.30	6.4	7.4	.07	3.3
JAN												
30...	992	--	1.35	173	32	.99	10	.00	10	11	.06	2.2
FEB												
26...	995	--	1.35	215	60	1.0	8.7	.00	8.6	9.6	.04	4.2
APR												
03...	1070	998	1.46	312	87	.63	6.0	.10	6.1	6.7	.04	3.9
30...	174	--	.24	808	--	.40	.27	.56	.83	1.2	.18	9.7
MAY												
21...	--	--	.27	--	--	--	--	.92	--	1.4	--	17
JUN												
25...	213	211	.29	736	96	.20	.38	.30	.68	.88	.04	4.1
JUL												
31...	390	--	.53	347	17	.17	.89	.11	1.0	1.2	--	1.7
AUG												
27...	856	--	1.16	254	6	.47	1.4	.00	.01	.48	.02	3.6

09235300 VERMILLION CREEK NEAR HIAWATHA, CO

LOCATION.--Lat 41°00'54", long 108°38'39", in NE¼SE¼NE¼ sec.15, T.12 N., R.100 W., Sweetwater County, WY, Hydrologic Unit 14040109, on right bank 0.7 mi (1.1 km) upstream from county road, 0.9 mi (1.4 km) downstream from Alkali Creek, 1.8 mi (2.9 km) upstream from Horseshoe Wash, 1.9 mi (3.1 km) upstream from Colorado-Wyoming State line, 2.3 mi (3.7 km) northwest of Hiawatha, and 49 mi (79 km) southwest of Rock Springs, WY.

DRAINAGE AREA.--196 mi² (508 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1975 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,610 ft (2,015 m), from topographic map.

REMARKS.--Records poor. No gage-height record Dec. 24 to Jan. 15, Jan. 31 to Feb. 6, Apr. 2-4, June 4-8, July 11 to Aug. 2. No diversion above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,160 ft³/s (32.9 m³/s) Sept. 7, 1978, gage height, 7.71 ft (2.350 m), from rating curve extended above 16 ft³/s (0.45 m³/s) on basis of slope-area measurements at gage heights of 3.03 ft (0.924 m), 6.52 ft (1.987 m) and 7.71 ft (2.350 m); no flow for many days during most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 458 ft³/s (13.0 m³/s) Aug. 20, gage height, 5.19 ft (1.582 m); no flow for many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.34	.43	.41	.00	.00	1.0	1.4	5.0	15	2.3	2.1	.74
2	.30	.45	.38	.00	.00	1.0	1.2	6.6	15	3.7	2.1	.69
3	.30	.46	.42	.00	.00	1.0	1.4	4.8	14	2.3	1.9	.50
4	.34	.41	.46	.00	.00	1.1	1.6	4.0	10	2.1	1.7	.38
5	.34	.42	.50	.00	.00	1.2	1.8	3.7	8.5	2.3	1.8	.26
6	.34	.33	.45	.00	.01	1.4	2.6	4.0	7.4	2.8	1.8	.27
7	.34	.37	.40	.00	.01	1.4	3.8	4.8	6.9	2.8	1.9	.26
8	.34	.45	.34	.00	.02	1.3	4.5	7.9	7.5	2.4	2.1	.26
9	.34	.43	.30	.00	.03	1.3	6.5	7.9	7.9	2.8	2.1	.26
10	.34	.10	.32	.00	.05	1.3	7.9	5.8	6.2	3.0	2.8	.30
11	.34	.03	.31	.01	.10	1.2	5.1	5.0	5.8	2.8	2.6	.30
12	.30	.03	.28	.01	.20	1.3	5.3	6.6	5.5	2.8	2.6	.30
13	.30	.02	.26	.00	.50	1.5	7.3	5.0	5.0	2.7	4.0	.38
14	.38	.03	.24	.00	1.0	1.6	9.9	5.0	4.8	2.7	3.5	.42
15	.42	.05	.23	.00	1.0	1.8	14	6.2	4.0	2.7	2.8	.38
16	.42	.10	.21	.00	.97	2.0	26	5.0	4.2	2.7	3.0	.42
17	.42	.14	.20	.00	.94	2.0	28	5.0	4.0	2.7	3.5	.42
18	.42	.20	.18	.00	.87	1.8	48	4.5	3.7	2.6	4.6	.46
19	.42	.30	.17	.00	.83	1.6	27	5.5	3.7	2.5	9.5	.46
20	.42	.40	.18	.00	.79	1.3	11	5.8	4.0	2.7	196	.46
21	.54	.36	.18	.00	.79	1.7	11	7.1	3.7	2.6	35	.50
22	.54	.36	.19	.00	.79	1.4	11	7.5	3.2	2.5	3.2	.50
23	.46	.38	.20	.00	.79	1.4	11	10	3.5	2.4	2.3	.50
24	.45	.39	.21	.00	.79	1.6	8.3	14	3.2	2.3	2.0	.50
25	.48	.40	.18	.00	.85	1.8	5.8	19	3.0	2.3	1.8	.50
26	.41	.38	.14	.00	.90	2.3	5.5	18	2.4	2.3	1.6	.59
27	.44	.36	.10	.00	.96	2.3	5.3	16	2.4	2.3	1.5	.69
28	.41	.39	.05	.00	1.0	1.9	5.0	19	2.6	2.2	1.3	.69
29	.41	.41	.03	.00	---	1.8	5.3	24	2.4	2.1	1.2	.69
30	.41	.44	.02	.00	---	1.7	5.3	18	2.1	2.1	.96	.64
31	.41	---	.01	.00	---	1.6	---	21	---	2.1	.85	---
TOTAL	12.12	9.02	7.55	.02	14.19	47.6	287.8	281.7	172.4	78.6	304.11	13.72
MEAN	.39	.30	.24	.001	.51	1.54	9.59	9.09	5.75	2.54	9.81	.46
MAX	.54	.46	.50	.01	1.0	2.3	48	24	15	3.7	196	.74
MIN	.30	.02	.01	.00	.00	1.0	1.2	3.7	2.1	2.1	.85	.26
AC-FT	24	18	15	.04	28	94	571	559	342	156	603	27

CAL YR 1978 TOTAL 686.78 MEAN 1.88 MAX 120 MIN .00 AC-FT 1360
WTR YR 1979 TOTAL 1228.83 MEAN 3.37 MAX 196 MIN .00 AC-FT 2440

09235300 VERMILLION CREEK NEAR HIAWATHA, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)
OCT											
26...	1130	.34	1850	8.2	2.0	3	--	10.6	1.6	660	320
NOV											
23...	0710	.38	1800	8.1	.0	33	--	11.3	1.5	590	150
DEC											
19...	1130	.17	2200	8.1	.0	1	--	11.2	1.4	830	480
FEB											
22...	1120	.79	2400	8.0	.0	31	--	10.6	2.1	700	290
MAR											
30...	1000	1.7	2000	8.2	.0	230	--	10.8	3.2	620	250
APR											
27...	1000	5.3	2600	8.3	8.0	600	--	9.8	--	770	460
JUN											
01...	1100	14	1210	8.3	11.0	--	1000	8.6	2.0	430	120
22...	1130	3.5	1370	9.3	19.0	--	270	7.4	2.6	440	74
AUG											
01...	1700	2.1	1170	8.4	26.0	--	92	7.5	3.2	310	0
28...	1630	1.2	1440	8.3	22.0	--	68	6.8	2.2	440	150

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT											
26...	150	69	230	3.9	5.2	410	0	340	760	37	.4
NOV											
23...	120	70	230	4.1	4.3	530	0	430	620	38	.3
DEC											
19...	190	86	250	3.8	5.4	420	0	340	970	36	.3
FEB											
22...	140	84	290	4.8	4.4	490	0	400	820	39	.3
MAR											
30...	130	72	240	4.2	5.2	450	0	370	700	31	.3
APR											
27...	150	95	310	4.9	4.1	370	0	300	1000	35	.3
JUN											
01...	83	53	120	2.5	2.1	380	0	312	320	16	.4
22...	67	65	160	3.3	4.1	440	0	360	380	18	.3
AUG											
01...	40	51	140	3.5	4.1	400	0	330	270	17	.4
28...	87	53	150	3.1	4.5	350	0	290	430	22	.3

09235300 VERMILLION CREEK NEAR HIAWATHA, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS NO3)	PHOS- PHORUS, TOTAL (MG/L AS P)	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)
OCT 26...	10	1460	.08	.03	.57	.60	.68	3.0	.02	160	60
NOV 23...	11	1360	.18	.05	.61	.66	.84	3.7	.05	170	60
DEC 19...	10	1760	.16	.05	.35	.40	.56	2.5	.02	180	80
FEB 22...	12	1630	.23	.07	.63	.70	.93	4.1	.04	180	60
MAR 30...	8.9	1410	.33	.08	1.2	1.3	1.6	7.2	.40	140	90
APR 27...	9.3	1790	.39	.06	1.6	1.7	2.1	9.3	.12	180	40
JUN 01...	12	794	.09	.05	2.9	3.0	3.1	14	1.3	120	20
22...	13	925	.05	.02	1.9	1.9	2.0	8.6	.30	170	40
AUG 01...	15	735	.05	.03	1.1	1.1	1.2	5.1	.01	170	--
28...	14	934	.03	.02	.93	.95	.98	4.3	.08	160	40

DATE	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS- SOLVED (UG/L AS AS)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)
OCT 26...	160	0	1	1	0	0	1	2	0	10
FEB 22...	1700	--	2	--	10	--	0	--	10	--
APR 27...	10000	--	10	--	0	--	2	--	20	--
AUG 01...	20	--	3	--	0	--	11	--	10	--

DATE	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM TOTAL RECOV- ERABLE (UG/L AS LI)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)
OCT 26...	4	4	350	2	3	60	70	210	200	.0
FEB 22...	8	--	2900	38	--	90	--	330	--	.0
APR 27...	21	--	20000	15	--	130	--	620	--	.0
AUG 01...	8	--	3200	4	--	60	--	120	--	.0

09235300 VERMILLION CREEK NEAR HIAWATHA, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	VANADIUM, DISSOLVED (UG/L AS V)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)
OCT 26...	.0	8	8	4	4	0	0	.0	10
FEB 22...	--	5	--	4	--	1	--	--	30
APR 27...	--	6	--	21	--	2	--	--	90
AUG 01...	--	7	--	6	--	1	--	--	60

DATE	ZINC, DISSOLVED (UG/L AS ZN)	GROSS ALPHA, DISSOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DISSOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DISSOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	RADIUM 226, DISSOLVED, RADON METHOD (PCI/L)	URANIUM NATURAL DISSOLVED (UG/L AS U)
OCT 26...	20	<19	<.4	<6.5	.8	<5.9	.9	.08	19
FEB 22...	--	--	--	--	--	--	--	--	--
APR 27...	--	--	--	--	--	--	--	--	--
AUG 01...	--	--	--	--	--	--	--	--	--

09235450 VERMILLION CREEK AT INK SPRINGS RANCH, CO

LOCATION.--Lat 40°45'43", long 108°43'33", in SE¼SE¼ sec.3, T.9 N., R.101 W., Moffat County, Hydrologic Unit 14040109, on right bank 0.3 mi (0.5 km) downstream from unnamed tributary, 0.5 mi (0.8 km) upstream from inflow of Ink Springs, 800 ft (244 m) southwest of Ink Springs Ranch headquarters, and about 37 mi (60 km) northwest of Maybell.

DRAINAGE AREA.--968 mi^2 (2,507 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1977 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,725 ft (1,745 m), from topographic map.

REMARKS.--Records good except those for winter period and those for period of no gage-height record, which are poor. Diversions above station for irrigation of hay meadows below station.

COOPERATION.--Records collected and computed by Colorado Division of Water Resources and reviewed by Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 614 ft^3/s (17.4 m^3/s), Sept. 15, 1978, gage height, 4.18 ft (1.274 m) from rating curve extended above 16 ft^3/s (0.45 m^3/s) on basis of slope-area measurement of peak flow; minimum daily, 1.1 ft^3/s (0.031 m^3/s) Aug. 29, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 304 ft^3/s (8.61 m^3/s) about Aug. 20, gage height, about 4.0 ft (1.219 m), from highwater mark; minimum daily, 1.3 ft^3/s (0.04 m^3/s) Aug. 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.3	2.0	3.5	3.5	3.5	19	35	18	20	5.0	2.6	1.4
2	2.3	2.4	3.5	3.5	3.0	22	23	17	19	4.9	2.5	1.6
3	2.3	2.2	3.8	3.5	3.5	22	14	15	16	4.0	2.5	1.7
4	2.3	2.3	3.8	3.2	3.0	22	12	12	14	3.1	2.5	1.8
5	2.3	2.4	4.0	3.5	3.5	24	28	11	16	3.3	2.5	1.9
6	2.3	2.2	4.0	3.5	3.2	34	36	11	14	3.2	2.5	2.0
7	2.3	2.0	4.0	3.5	3.8	63	42	13	13	3.6	2.5	2.0
8	2.3	3.0	4.0	3.5	4.2	33	73	13	12	3.4	2.5	2.0
9	2.3	2.6	4.0	3.5	4.0	25	103	13	16	3.4	2.5	2.0
10	2.3	2.3	4.2	3.5	2.0	22	75	12	18	3.4	2.5	2.0
11	2.3	2.2	3.8	3.5	2.0	28	59	11	16	3.4	2.5	2.2
12	2.3	2.2	3.8	3.5	3.2	34	61	11	14	3.6	2.5	2.2
13	2.3	2.3	4.0	3.2	7.4	37	41	11	13	3.6	2.5	2.2
14	2.3	2.3	4.0	3.5	12	31	25	10	12	3.5	2.5	2.2
15	2.3	2.4	4.0	3.5	10	32	30	8.0	11	3.5	2.5	2.4
16	2.3	2.4	4.0	3.2	8.4	36	40	8.8	9.7	3.5	2.5	2.4
17	2.3	2.4	4.0	3.5	7.4	34	46	8.8	9.2	3.0	2.5	2.4
18	2.3	2.5	4.0	3.5	6.3	29	55	12	8.8	3.0	2.5	2.4
19	2.3	2.5	3.8	4.2	7.4	23	65	12	9.6	3.0	25	2.4
20	2.3	2.6	3.5	4.2	7.0	19	55	12	10	2.8	80	2.4
21	2.2	2.8	3.5	4.0	5.7	21	40	13	9.4	2.8	50	2.3
22	2.0	3.0	3.5	3.5	8.0	21	29	14	8.1	2.8	30	2.3
23	2.2	3.5	3.5	3.0	10	19	30	13	8.0	2.8	9.2	2.3
24	2.3	4.0	3.5	2.6	12	21	30	17	7.8	2.8	4.5	2.3
25	2.3	4.2	3.5	2.2	14	24	25	22	7.9	2.7	2.4	2.4
26	2.2	4.2	3.5	2.2	16	24	25	30	7.0	2.7	2.0	2.5
27	2.2	4.2	4.0	2.0	16	32	25	20	5.6	2.7	1.5	12
28	2.0	4.2	4.2	2.0	17	41	20	20	4.8	2.6	1.3	4.5
29	1.8	4.2	4.0	2.0	---	33	20	18	4.8	2.6	1.5	3.7
30	2.0	4.2	4.0	6.0	---	39	16	22	4.9	2.6	1.4	3.5
31	2.2	---	4.0	5.4	---	48	---	20	---	2.6	1.5	---
TOTAL	69.4	85.7	118.9	105.4	203.5	912	1178	448.6	339.6	99.9	255.4	79.4
MEAN	2.24	2.86	3.84	3.40	7.27	29.4	39.3	14.5	11.3	3.22	8.24	2.65
MAX	2.3	4.2	4.2	6.0	17	63	103	30	20	5.0	80	12
MIN	1.8	2.0	3.5	2.0	2.0	19	12	8.0	4.8	2.6	1.3	1.4
AC-FT	138	170	236	209	404	1810	2340	890	674	198	507	157

CAL YR 1978 TOTAL 2246.8 MEAN 6.16 MAX 100 MIN 1.1 AC-FT 4460
WTR YR 1979 TOTAL 3895.8 MEAN 10.7 MAX 103 MIN 1.3 AC-FT 7730

NOTE.--NO GAGE-HEIGHT RECORD JULY 17 TO AUG. 22.

09235450 VERMILLION CREEK AT INK SPRINGS RANCH, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1977 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	TEMPER-ATURE (DEG C)
OCT		
30...	1400	12.5
NOV		
16...	1140	10.0
30...	1300	11.0
DEC		
19...	1300	11.0
JAN		
24...	1250	10.0
25...	1400	11.0
FEB		
20...	1055	6.5
MAR		
09...	1435	3.0
MAR		
15...	1220	5.0
APR		
03...	1200	3.0
30...	1145	12.0
MAY		
23...	1140	17.5
JUL		
20...	1230	27.0
AUG		
30...	1000	14.5
SEP		
26...	1115	17.5

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	COLOR (PLAT-INUM-COBALT UNITS)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREP-TOCOCCI FECAL, (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)
OCT											
30...	1400	2.3	1250	8.0	4	--	--	57	260	240	--
NOV											
30...	1300	4.5	1250	7.9	--	--	--	3	--	--	410
DEC											
19...	1300	3.8	900	8.1	--	--	--	11	K16	K24	270
JAN											
25...	1400	2.1	950	7.9	--	--	--	11	--	--	260
FEB											
20...	1055	5.2	1150	7.7	--	--	9.9	18	K20	K8400	350
APR											
03...	1200	12	2120	7.8	--	--	--	72	--	--	810
30...	1145	13	2080	8.1	--	1600	8.7	--	K52	620	760
MAY											
23...	1140	11	1880	7.7	--	--	7.4	160	200	560	640
JUL											
20...	1230	2.7	1000	7.7	--	--	6.5	11	200	96	310
AUG											
30...	1000	1.4	1100	7.9	--	23	6.2	--	120	500	330
SEP											
26...	1115	2.4	925	8.0	--	--	8.3	170	440	2000	310

K BASED ON NON-IDEAL COLONY COUNT.

09235450 VERMILLION CREEK AT INK SPRINGS RANCH, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)
OCT 30...	--	--	36	130	--	8.2	210	0	170	330	150
NOV 30...	210	100	39	120	2.6	7.0	240	0	200	310	130
DEC 19...	100	65	27	87	2.3	7.6	210	0	170	130	140
JAN 25...	100	63	26	84	2.2	6.7	200	0	160	100	140
FEB 20...	170	94	27	120	2.8	--	220	0	180	300	84
APR 03...	570	210	70	200	3.1	7.7	290	0	240	870	69
30...	530	180	75	210	3.3	6.0	280	0	230	780	68
MAY 23...	320	140	70	180	3.1	16	390	0	320	650	61
JUL 20...	110	78	28	100	2.5	8.0	240	0	200	140	140
AUG 30...	120	83	30	100	2.4	7.8	260	0	210	160	140
SEP 26...	120	76	29	100	2.5	7.0	--	--	190	140	140

DATE	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)
OCT 30...	.3	13	--	--	--	--	.01	.01	.50	.51	.52
NOV 30...	.3	14	882	839	1.20	10.7	.14	.26	.09	.35	.49
DEC 19...	.3	12	564	573	.77	5.79	.26	.01	.04	.05	.31
JAN 25...	.3	12	548	531	.75	3.11	.14	.00	.01	.01	.15
FEB 20...	.3	12	755	746	1.03	10.6	.63	.07	.76	.83	1.5
APR 03...	.4	12	1940	1580	2.64	65.0	.61	.09	3.8	3.9	4.5
30...	.4	11	1650	1470	2.24	57.9	.36	.04	5.0	5.0	5.4
MAY 23...	.4	17	1390	1330	1.89	42.4	.35	.01	6.3	6.3	6.7
JUL 20...	.3	12	594	625	.81	4.46	.18	.04	.09	.13	.31
AUG 30...	.3	15	663	665	.90	2.54	.17	.11	.28	.39	.56
SEP 26...	.4	13	605	620	.82	3.92	.04	.04	.22	.26	.30

09235450 VERMILLION CREEK AT INK SPRINGS RANCH, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	BORON, DIS-SOLVED (UG/L AS B)	IRON, DIS-SOLVED (UG/L AS FE)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	PHYTO-PLANK-TON, TOTAL (CELLS PER ML)	PERI-PHYTON BIOMASS ASH WEIGHT G/SQ M	PERI-PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M
OCT 30...	.01	.00	110	30	3.9	--	.10	--	--	--
NOV 30...	.03	.00	170	10	3.4	.5	--	780	--	--
DEC 19...	.01	.01	160	40	.9	.5	--	140	--	--
JAN 25...	.01	.01	150	20	1.1	.3	--	290	--	--
FEB 20...	.34	.01	120	10	--	--	--	950	--	--
APR 03...	1.3	.02	150	20	8.6	8.5	--	1600	--	--
30...	1.9	.01	190	10	7.1	110	--	110	--	--
MAY 23...	2.0	.02	110	220	9.7	13	--	1100	2.99	3.23
JUL 20...	.03	.04	160	30	4.7	.3	--	1200	--	--
AUG 30...	.03	.00	160	140	--	--	--	420	--	--
SEP 26...	.03	.02	160	50	40	.3	--	1800	--	--

DATE	TIME	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	BARIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS BA)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	BERYL-LIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)
OCT 30...	1400	20	--	1	--	--	--	--	--	--	--
DEC 19...	1300	5	--	2	--	--	50	--	--	<1	--
APR 03...	1200	0	--	1	--	--	0	--	--	0	--
30...	1145	0	34	1	14	600	0	72	0	0	0
AUG 30...	1000	50	2	2	6	0	60	100	0	<1	0

DATE	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	CHRO-MIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	CHRO-MIUM, HEXA-VALENT, DIS. (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COBALT, DIS-SOLVED (UG/L AS CO)	COBALT, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)
OCT 30...	--	--	--	--	--	--	0	--	--	--	--
DEC 19...	--	4	--	--	0	--	--	--	<3	--	4
APR 03...	--	1	--	--	0	--	--	--	0	--	2
30...	0	0	0	70	10	4	--	32	0	0	3
AUG 30...	0	<1	1	30	10	2	--	0	<3	10	1

DATE	COPPER, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CU)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	LEAD, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS PB)	LITHIUM TOTAL RECOV-ERABLE (UG/L AS LI)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MANGA-NESE, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)
OCT 30...	--	--	--	--	--	130	--	60	--	--	.0
DEC 19...	--	--	20	--	--	110	--	40	--	--	.0
APR 03...	--	--	6	--	--	80	--	20	--	--	1.0
30...	8	150	0	0	160	100	2300	10	290	.2	.0
AUG 30...	3	4	0	12	120	130	90	70	660	.1	.0

09235450 VERMILLION CREEK AT INK SPRINGS RANCH, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	MERCURY RECOV. FM BOT-TOM MA-TERIAL (UG/G AS HG)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	MOLYB-DENUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	NICKEL, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELF-NIUM, DIS-SOLVED (UG/L AS SE)	SELE-NIUM, TOTAL IN BOT-TOM MA-TERIAL (UG/G)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)
OCT 30...	--	--	--	--	--	--	--	--	--	--	950
DEC 19...	--	--	8	--	--	2	--	--	1	--	--
APR 03...	--	--	8	--	--	2	--	--	2	--	--
30...	.01	5	5	6	67	5	0	5	0	0	--
AUG 30...	.02	6	<10	0	0	1	10	1	1	0	--

DATE	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	ZINC, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS ZN)	GROSS ALPHA, DIS-SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS-SOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)
OCT 30...	.0	--	--	--	--	--	--	--	--	--
DEC 19...	.7	--	7	--	--	--	--	--	--	--
APR 03...	.0	--	20	--	--	--	--	--	--	--
30...	.0	310	20	23	39	160	<11	99	<9.6	91
AUG 30...	1.0	0	<3	7	<12	1.7	12	1.7	11	1.7

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 30...	1300	2.0	23	.12	39
NOV 30...	1400	4.2	107	1.2	82
DEC 19...	1300	3.8	8	.08	75
JAN 03...	1200	--	14	--	--
FEB 20...	1130	7.0	629	12	82
APR 03...	1100	14	2720	103	--
APR 30...	1135	13	2280	80	--
MAY 23...	1140	11	5670	173	96
JUL 20...	1230	2.7	28	.21	--
AUG 30...	1000	1.4	87	.33	--
SEP 26...	1130	2.5	5	.03	--

09235450 VERMILLION CREEK AT INK SPRINGS RANCH, CO--Continued

PHYTOPLANKTON ANALYSES, OCTOBER 1978 TO SEPTEMBER 1979

DATE	NOV 30,78	DEC 18,78	JAN 25,79	FEB 20,79	APR 3,79
TIME	1300	1300	1400	1055	1200
TOTAL CELLS/ML	780	140	290	950	1600
DIVERSITY: DIVISION	0.0	0.0	0.9	2.0	0.4
.CLASS	0.0	0.0	0.9	2.2	0.4
..ORDER	0.0	0.0	1.0	2.6	0.4
...FAMILY	2.4	1.3	2.6	2.9	0.4
....GENUS	2.7	1.3	2.8	2.9	0.4

ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
CHLOROPHYTA (GREEN ALGAE)										
.CHLOROPHYCEAE										
..CHLOROCOCCALES										
...OOCYSTACEAE										
....ANKISTRODESMUS	--	-	--	-	--	-	35	4	--	-
....DICTYOSPHAERIUM	--	-	--	-	--	-	--	-	--	-
...SCENEDESMACEAE										
....CRUCIGENIA	--	-	--	-	--	-	280#	30	--	-
....SCENEDESMUS	--	-	--	-	--	-	--	-	--	-
..VOLVOCALES										
...CHLAMYDOMONADACEAE										
....CARTERIA	--	-	--	-	--	-	--	-	--	-
....CHLAMYDOMONAS	--	-	--	-	--	-	70	7	--	-
CHRYSOPHYTA										
.BACILLARIOPHYCEAE										
..CENTRALES										
...COSCINODISCACEAE										
....CYCLOTELLA	--	-	--	-	5	2	35	4	--	-
..PENNALES										
...ACHNANTHACEAE										
....ACHNANTHES	160#	20	87#	60	--	-	--	-	--	-
....COCCONEIS	--	-	--	-	--	-	--	-	--	-
...CYMBELLACEAE										
....CYMBELLA	290#	37	43#	30	35	12	--	-	--	-
....EPITHEMIA	14	2	--	-	--	-	--	-	--	-
...DIATOMACEAE										
....DIATOMA	29	4	--	-	--	-	--	-	--	-
...FRAGILARIACEAE										
....FRAGILARIA	--	-	--	-	45#	16	--	-	--	-
....SYNEDRA	43	6	--	-	10	4	--	-	--	-
...GOMPHONEMATACEAE										
....GOMPHONEMA	--	-	--	-	--	-	--	-	--	-
...NAVICULACEAE										
....GYROSIGMA	14	2	--	-	5	2	--	-	--	-
....NAVICULA	58	7	14	10	45#	16	35	4	--	-
....PINNULARIA	29	4	--	-	--	-	--	-	--	-
...NITZSCHIACEAE										
....NITZSCHIA	43	6	--	-	35	12	--	-	--	-
...SURIRELLACEAE										
....SURIRELLA	100	13	--	-	25	9	--	-	--	-
.CHRYSOPHYCEAE										
..CHRYSOMONADALES										
...OCHROMONADACEAE										
....OCHROMONAS	--	-	--	-	--	-	110	11	--	-
CRYPTOPHYTA (CRYPTOMONADS)										
.CRYPTOPHYCEAE										
..CRYPTOMONADALES										
...CRYPTOCHRYSIDACEAE										
....CHROOMONAS	--	-	--	-	--	-	35	4	--	-
...CRYPTOMONADACEAE										
....CRYPTOMONAS	--	-	--	-	--	-	110	11	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)										
.CYANOPHYCEAE										
..CHROOCOCCALES										
...CHROOCOCCACEAE										
....AGMENELLUM	--	-	--	-	--	-	--	-	--	-
....ANACYSTIS	--	-	--	-	81#	28	210#	22	1500#	93
..HORMOGONALES										
...NOSTOCACEAE										
....ANABAENA	--	-	--	-	--	-	--	-	--	-
...OSCILLATORIACEAE										
....OSCILLATORIA	--	-	--	-	--	-	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)										
.EUGLENOPHYCEAE										
..EUGLENALES										
...EUGLENACEAE										
....TRACHELOMONAS	--	-	--	-	--	-	35	4	120	7

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

09235450 VERMILLION CREEK AT INK SPRINGS RANCH, CO--Continued

PHYTOPLANKTON ANALYSES, OCTOBER 1978 TO SEPTEMBER 1979

DATE	APR 30,79	MAY 23,79	JUL 20,79	AUG 30,79	SEP 26,79
TIME	1145	1140	1230	1000	1115
TOTAL CELLS/ML	110	1100	1200	420	1800
DIVERSITY: DIVISION	1.5	0.0	1.0	0.5	1.4
.CLASS	1.5	0.0	1.0	0.5	1.4
..ORDER	1.5	0.0	1.5	0.9	2.0
...FAMILY	1.5	0.0	2.4	1.9	2.1
....GENUS	1.5	0.0	2.4	1.9	2.2

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)										
.CHLOROPHYCEAE										
..CHLOROCOCCALES										
...OOCYSTACEAE										
....ANKISTRODESMUS	--	-	--	-	--	-	15	4	41	2
....DICTYOSPHAERIUM	--	-	--	-	--	-	--	-	55	3
...SCENEDESMACEAE										
....CRUCIGENIA	--	-	--	-	--	-	--	-	--	-
....SCENEDESMUS	--	-	1100#	100	--	-	--	-	14	1
..VOLVOCALES										
...CHLAMYDOMONADACEAE										
....CARTERIA	--	-	--	-	--	-	--	-	27	2
....CHLAMYDOMONAS	56#	50	--	-	--	-	35	8	41	2
CHRYSOPHYTA										
.BACILLARIOPHYCEAE										
..CENTRALES										
...COSCINODISCACEAE										
....CYCLOTELLA	--	-	--	-	26	2	20	5	160	9
..PENNALES										
...ACHNANTHACEAE										
....ACHNANTHES	--	-	--	-	39	3	20	5	--	-
....COCCONEIS	--	-	--	-	13	1	--	-	--	-
...CYMBELLACEAE										
....CYMBELLA	--	-	--	-	--	-	--	-	--	-
....EPITHEMIA	--	-	--	-	--	-	--	-	--	-
...DIATOMACEAE										
....DIATOMA	--	-	--	-	--	-	--	-	--	-
...FRAGILARIACEAE										
....FRAGILARIA	--	-	--	-	--	-	--	-	--	-
....SYNEDRA	--	-	--	-	13	1	50	12	--	-
...GOMPHONEMATACEAE										
....GOMPHONEMA	--	-	--	-	90	7	--	-	14	1
...NAVICULACEAE										
....GYROSIGMA	--	-	--	-	--	-	--	-	--	-
....NAVICULA	--	-	--	-	39	3	260#	62	27	2
....PINNULARIA	--	-	--	-	--	-	--	-	--	-
...NITZSCHIACEAE										
....NITZSCHIA	--	-	--	-	390#	31	20	5	340#	19
...SURIRELLACEAE										
....SURIRELLA	28#	25	--	-	26	2	--	-	--	-
.CHRYSOPHYCEAE										
..CHRYSOMONADALES										
...OCHROMONADACEAE										
....OCHROMONAS	--	-	--	-	--	-	--	-	--	-
CRYPTOPHYTA (CRYPTOMONADS)										
.CRYPTOPHYCEAE										
..CRYPTOMONADALES										
...CRYPTOCHRYSIDACEAE										
....CHROOMONAS	--	-	--	-	--	-	--	-	--	-
...CRYPTOMONADACEAE										
....CRYPTOMONAS	--	-	--	-	--	-	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)										
.CYANOPHYCEAE										
..CHROOCOCCALES										
...CHROOCOCCACEAE										
....AGMENELLUM	--	-	--	-	150	13	--	-	--	-
....ANACYSTIS	--	-	--	-	--	-	--	-	55	3
..HORMOGONALES										
...NOSTOCACEAE										
....ANABAENA	--	-	--	-	--	-	--	-	990#	55
...OSCILLATORIACEAE										
....OSCILLATORIA	--	-	--	-	450#	36	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)										
.EUGLENOPHYCEAE										
..EUGLENALES										
...EUGLENACEAE										
....TRACHELOMONAS	28#	25	--	-	--	-	--	-	41	2

NOTE: # - DOMINANT ORGANISM: EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED: LESS THAN 1/2%

09235800 POT CREEK NEAR VERNAL, UT

LOCATION.--Lat 40°40'25", long 109°03'03", in SW¼NE¼SE¼ sec.1, T.2 S., R.25 E., Daggett County, UT, Hydrologic Unit 14040106, on left bank 0.2 mi (0.3 km) upstream from Colorado-Utah State line, 7 mi (11 km) upstream from mouth, and 29 mi (47 km) northeast of Vernal.

DRAINAGE AREA.--107 mi^2 (277 km^2).

PERIOD OF RECORD.--August 1957 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 6,900 ft (2,103 m), from topographic map.

REMARKS.--Records good. Flow regulated by Matt Warner and Crouse Reservoirs, 14 mi (23 km) and 7 mi (11 km) upstream, respectively, combined capacity, about 4,000 acre-ft (4.93 hm^3). Several diversions for irrigation above station, including one to Crouse Creek basin for irrigation of about 100 acres (405,000 m^2) in Browns Park.

AVERAGE DISCHARGE.--22 years, 1.79 ft^3/s (0.051 m^3/s), 1,300 acre-ft/yr (1.60 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 286 ft^3/s (8.10 m^3/s) Apr. 7, 1962, gage height, 3.85 ft (1.173 m), from rating curve extended above 170 ft^3/s (4.81 m^3/s); maximum gage height, 3.99 ft (1.216 m) Mar. 15, 1966 (backwater from ice); no flow for part of each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 11 ft^3/s (0.31 m^3/s) Apr. 17, gage height, 1.36 ft (0.415 m); no flow most of the year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	1.6	.60	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.88	.98	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.57	.82	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.36	.62	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.53	.43	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	3.4	.37	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	3.2	.51	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.04	2.4	.55	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	2.9	.49	.00	4.0	.00	.00
10	.00	.00	.00	.00	.00	.00	3.2	.43	.00	6.8	.00	.00
11	.00	.00	.00	.00	.00	.00	1.6	.48	.00	7.3	.00	.00
12	.00	.00	.00	.00	.00	.01	1.2	.40	.00	7.4	.00	.00
13	.00	.00	.00	.00	.00	.05	.95	.25	.00	7.5	.03	.00
14	.00	.00	.00	.00	.00	.01	1.6	.20	.00	7.6	.00	.00
15	.00	.00	.00	.00	.00	.05	3.3	.16	.00	7.5	.00	.00
16	.00	.00	.00	.00	.00	.02	4.4	.13	.00	7.4	.00	.00
17	.00	.00	.00	.00	.00	.02	5.9	.10	.00	7.5	.00	.00
18	.00	.00	.00	.00	.00	.02	5.0	.09	.00	7.4	.00	.00
19	.00	.00	.00	.00	.00	.01	3.5	.07	.00	7.4	.00	.00
20	.00	.00	.00	.00	.00	.01	2.1	.06	.00	7.1	.00	.00
21	.00	.00	.00	.00	.00	.01	1.7	.05	.00	7.1	.00	.00
22	.00	.00	.00	.00	.00	.04	1.4	.03	.00	4.5	.00	.00
23	.00	.00	.00	.00	.00	.00	1.5	.02	.00	.77	.00	.00
24	.00	.00	.00	.00	.00	.03	2.7	.01	.00	.23	.00	.00
25	.00	.00	.00	.00	.00	.05	1.6	.03	.00	.04	.00	.00
26	.00	.00	.00	.00	.00	.07	1.2	.02	.00	.00	.00	.00
27	.00	.00	.00	.00	.00	.42	.95	.02	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	.29	.76	.01	.00	.00	.00	.00
29	.00	.00	.00	.00	---	.34	.69	.01	.00	.00	.00	.00
30	.00	.00	.00	.00	---	2.1	.58	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	2.1	---	.00	---	.00	.00	---
TOTAL	.00	.00	.00	.00	.00	5.70	61.67	7.91	.00	97.54	.03	.00
MEAN	.000	.000	.000	.000	.000	.18	2.06	.26	.000	3.15	.001	.000
MAX	.00	.00	.00	.00	.00	2.1	5.9	.98	.00	7.6	.03	.00
MIN	.00	.00	.00	.00	.00	.00	.36	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	.00	11	122	16	.00	193	.06	.00

CAL YR 1978 TOTAL 86.24 MEAN .24 MAX 6.9 MIN .00 AC-FT 171
WTR YR 1979 TOTAL 172.85 MEAN .47 MAX 7.6 MIN .00 AC-FT 343

09236000 BEAR RIVER NEAR TOPONAS, CO

LOCATION.--Lat 40°03'00", long 107°04'00", in NW¼ sec.20, T.1 N., R.86 W., Garfield County, Hydrologic Unit 14050001, on right bank just downstream from Yampa Reservoir Dam at Stillwater campground, 0.8 mi (1.3 km) downstream from Mandall Creek, 0.8 mi (1.3 km) upstream from Dome Creek, and 14 mi (23 km) west of Toponas.

DRAINAGE AREA.--23 mi² (60 km²), approximately.

PERIOD OF RECORD.--October 1952 to September 1965, October 1966 to current year. Published as Yampa River near Toponas prior to October 1973.

GAGE.--Water-stage recorder and Parshall flume. Altitude of gage is 9,700 ft (2,957 m), from river-profile map. Oct. 28, 1952, to Sept. 30, 1965, water-stage recorder at site 50 ft (15 m) upstream at different datum.

REMARKS.--Records good. Flow regulated by Stillwater Reservoir, capacity, 6,200 acre-ft (7.64 hm³) 3.5 mi (5.6 km) upstream and Yampa Reservoir, capacity, 620 acre-ft (764,000 m³). Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--26 years, 39.8 ft³/s (1.127 m³/s), 28,840 acre-ft/yr (35.6 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 436 ft³/s (12.3 m³/s) July 2, 1957, gage height, 6.39 ft (1.948 m), site and datum then in use; minimum daily, 1.6 ft³/s (0.045 m³/s) Oct. 6-24, Nov. 18 to Dec. 8, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 227 ft³/s (6.43 m³/s) at 2200 June 15, gage height, 2.67 ft (0.814 m); minimum daily, 15 ft³/s (0.42 m³/s) Apr. 30, May 4, 12, 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	24	22	19	19	19	17	16	61	137	101	27
2	29	24	22	19	20	20	17	16	62	140	98	27
3	29	24	21	19	19	20	17	16	70	144	94	27
4	29	24	21	19	19	20	17	15	76	144	92	26
5	27	24	21	20	19	20	17	17	86	142	91	26
6	25	24	22	18	19	20	17	19	97	139	85	26
7	25	23	22	17	19	20	16	21	109	128	71	26
8	25	24	22	17	20	20	16	20	97	113	56	25
9	25	24	22	17	20	20	16	17	91	110	44	25
10	25	23	22	17	21	19	17	16	85	109	41	25
11	25	23	20	18	19	19	17	16	98	121	38	25
12	24	25	19	19	19	19	17	15	123	120	36	24
13	24	25	19	18	19	18	16	15	137	119	36	23
14	24	24	19	18	18	18	15	19	156	128	35	23
15	24	23	19	18	20	18	15	22	185	127	34	23
16	24	23	19	18	20	18	16	28	203	128	34	22
17	24	23	19	18	20	18	17	32	194	130	34	23
18	24	22	19	18	19	18	17	39	187	129	34	26
19	24	22	20	17	19	18	17	47	180	126	33	36
20	24	22	19	17	19	18	16	51	170	124	33	37
21	25	22	19	17	20	19	16	54	158	125	34	37
22	28	22	19	17	20	19	16	59	144	124	31	36
23	26	22	19	18	20	18	17	66	143	120	30	33
24	25	22	19	17	20	17	18	68	139	120	29	23
25	26	22	19	17	21	17	17	72	134	118	28	21
26	25	22	18	17	19	17	16	74	120	121	28	21
27	25	21	18	17	19	17	16	78	134	129	28	21
28	25	21	18	18	19	17	17	85	135	133	28	21
29	25	21	20	18	---	17	16	89	137	130	28	20
30	24	22	20	18	---	17	15	79	139	126	28	20
31	25	---	20	18	---	17	---	68	---	112	28	---
TOTAL	788	687	618	553	545	572	494	1250	3850	3916	1450	775
MEAN	25.4	22.9	19.9	17.8	19.5	18.5	16.5	40.3	128	126	46.8	25.8
MAX	29	25	22	20	21	20	18	89	203	144	101	37
MIN	24	21	18	17	18	17	15	15	61	109	28	20
AC-FT	1560	1360	1230	1100	1080	1130	980	2480	7640	7770	2880	1540

CAL YR 1978 TOTAL 16212 MEAN 44.4 MAX 390 MIN 10 AC-FT 32160
WTR YR 1979 TOTAL 15498 MEAN 42.5 MAX 203 MIN 15 AC-FT 30740

09239500 YAMPA RIVER AT STEAMBOAT SPRINGS, CO

LOCATION.--Lat 40°29'01", long 106°49'54", in NW¼NE¼ sec.17, T.6 N., R.84 W., Routt County, Hydrologic Unit 14050001, on right bank 30 ft (9 m) downstream from Fifth Street Bridge in Steamboat Springs and 0.6 mi (1.0 km) upstream from Soda Creek.

DRAINAGE AREA.--604 mi² (1,564 km²).

PERIOD OF RECORD.--May 1904 to October 1906, October 1909 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 764: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 6,695.47 ft (2,040.779 m), National Geodetic Vertical Datum of 1929. Prior to May 8, 1905, nonrecording gage at bridge 0.2 mi (0.3 km) upstream at datum 4.16 ft (1.268 m) higher. May 8, 1905, to Oct. 31, 1906, nonrecording gage on bridge 30 ft (9 m) upstream at datum 0.44 ft (0.134 m) higher. Mar. 8, 1910, to Sept. 11, 1934, water-stage recorder at present site at datum 0.44 ft (0.134 m) higher.

REMARKS.--Records good. Natural flow of stream affected by two diversions for irrigation to Egeria Creek in Colorado River basin, one diversion for irrigation from Trout Creek drainage to Oak Creek drainage, irrigation of about 19,700 acres (79.7 km²) above station, and by storage reservoirs. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--72 years, 466 ft³/s (13.20 m³/s), 337,600 acre-ft/yr (416 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,820 ft³/s (193 m³/s) June 14, 1921, gage height, 7.08 ft (2.158 m), present datum, from rating curve extended above 4,800 ft³/s (140 m³/s); minimum daily, 4.0 ft³/s (0.11 m³/s) Sept. 8, 1934, Sept. 10-13, 1944.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,000 ft³/s (85 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
May 28	2200	*4,380	124	6.03	1.838	June 14	2300	3,240	91.8	5.35	1.631
June 7	0400	3,750	106	5.66	1.725						

Minimum daily discharge, 57 ft³/s (1.61 m³/s) Sept. 24, 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	82	116	107	107	100	85	150	1010	2040	1010	159	96
2	79	114	108	98	93	90	140	1030	2000	902	151	88
3	77	113	93	100	93	86	130	1160	2110	790	146	82
4	77	116	91	102	93	90	135	995	2280	758	140	78
5	79	116	93	105	85	82	140	958	2540	686	135	74
6	79	113	93	107	82	82	154	1110	2840	623	135	71
7	81	108	95	112	75	82	195	1210	3370	640	128	66
8	82	112	98	102	85	90	260	1120	2580	555	119	65
9	84	112	102	96	87	98	319	1030	2110	486	96	66
10	82	114	107	103	85	99	363	999	1740	421	114	66
11	82	115	103	110	83	94	350	832	1840	369	142	69
12	81	128	105	114	79	87	281	747	2100	326	141	69
13	81	131	105	115	80	96	240	723	2430	290	148	65
14	79	122	108	116	82	100	228	787	2720	271	153	65
15	79	115	110	103	85	104	326	973	2740	249	148	65
16	80	108	114	102	82	112	560	1200	2520	227	148	65
17	81	99	107	100	83	120	924	1390	2290	224	158	64
18	84	90	114	100	80	128	1310	1720	1980	229	168	61
19	87	83	123	102	77	135	1480	2010	1640	248	191	60
20	90	88	118	100	74	126	1210	2220	1430	241	299	58
21	91	91	112	91	77	123	1200	2380	1400	217	309	58
22	125	95	107	96	78	130	1200	2530	1460	214	211	59
23	138	105	105	97	81	133	1450	2690	1470	218	157	59
24	129	105	105	96	82	126	1550	2910	1440	236	136	57
25	129	106	105	97	83	126	1390	2940	1350	233	125	57
26	122	106	107	97	79	128	1170	3310	1270	207	116	58
27	113	107	106	99	81	142	1110	3470	1190	191	108	61
28	110	105	107	98	84	152	1120	3990	1160	204	106	61
29	110	105	107	99	---	154	1030	3950	1110	189	99	61
30	110	105	107	99	---	159	1020	2820	1050	167	94	60
31	112	---	106	99	---	158	---	2360	---	160	95	---
TOTAL	2915	3243	3268	3162	2328	3517	21135	56574	58200	11781	4575	1984
MEAN	94.0	108	105	102	83.1	113	705	1825	1940	380	148	66.1
MAX	138	131	123	116	100	159	1550	3990	3370	1010	309	96
MIN	77	83	91	91	74	82	130	723	1050	160	94	57
AC-FT	5780	6430	6480	6270	4620	6980	41920	112200	115400	23370	9070	3940

CAL YR 1978 TOTAL 215834 MEAN 591 MAX 4180 MIN 67 AC-FT 428100
WTR YR 1979 TOTAL 172682 MEAN 473 MAX 3990 MIN 57 AC-FT 342500

09241000 ELK RIVER AT CLARK, CO

LOCATION.--Lat 40°43'03", long 106°54'55", in NW¼NW¼ sec.27, T.9 N., R.85 W., Routt County, Hydrologic Unit 14050001, on left bank 30 ft (9 m) downstream from bridge on State Highway 129, 0.8 mi (1.3 km) north of Clark, and 2.0 mi (3.2 km) upstream from Cottonwood Gulch.

DRAINAGE AREA.--206 mi² (534 km²).

PERIOD OF RECORD.--May 1910 to September 1922 (published as "near Clark"), April 1930 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1733: 1956.

GAGE.--Water-stage recorder. Datum of gage is 7,267.75 ft (2,215.210 m) (State Highway Department bench mark). May 1910 to September 1922, nonrecording gage at site 30 ft (9 m) upstream at datum 0.15 ft (0.046 m) lower. Apr. 23, 1930, to Sept. 27, 1934, water-stage recorder at present site at datum 0.15 ft (0.046 m) lower.

REMARKS.--Records fair except those for winter period, which are poor. Diversions above station for irrigation of about 230 acres (931,000 m²) above and about 460 acres (1.86 km²) below station. Natural flow of stream affected by storage in Lester Creek Reservoir (known also as Pearl Lake), capacity, 5,660 acre-ft (6.98 hm³) since 1963 and Steamboat Lake, capacity, 23,060 acre-ft (28.4 hm³) since 1968. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--61 years, 335 ft³/s (9.487 m³/s), 242,700 acre-ft/yr (299 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 4,470 ft³/s (127 m³/s) June 6, 9, 1912; minimum daily determined, 22 ft³/s (0.62 m³/s) Dec. 12, 1963, but a lesser discharge may have occurred during periods of no gage-height record prior to 1939.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,900 ft³/s (54 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
May 28	2200	*2,890	81.8	4.98	1.518	June 14	2300	2,880	81.6	*5.08	1.548
June 6	2400	2,320	4.62	4.62	1.408						

Minimum daily discharge, 29 ft³/s (0.821 m³/s) Feb. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	67	60	54	45	34	40	44	378	1240	1440	202	85
2	66	59	54	45	34	40	42	402	1270	1350	191	80
3	65	59	54	45	34	40	40	399	1400	1260	177	77
4	64	58	54	44	34	40	39	392	1560	1250	168	74
5	63	58	54	44	33	42	39	496	1720	1090	159	69
6	63	51	54	44	32	43	39	640	1950	974	154	66
7	63	47	54	43	32	44	43	571	1980	912	151	64
8	62	51	54	43	32	44	52	470	1610	905	148	62
9	61	50	54	43	32	44	61	496	1350	865	147	61
10	60	50	54	42	32	46	72	593	1250	792	147	61
11	60	50	54	41	32	47	76	587	1400	755	143	61
12	59	50	54	41	32	48	71	619	1640	711	134	60
13	58	50	54	41	32	50	65	661	1960	680	133	58
14	57	50	52	41	32	48	61	846	2410	642	135	58
15	57	52	52	40	34	45	67	1080	2650	588	140	56
16	57	52	50	40	32	43	95	1290	2240	545	136	55
17	56	52	50	40	32	41	142	1410	1930	522	132	55
18	57	52	50	40	30	40	196	1650	1650	474	124	54
19	58	52	50	40	29	39	258	1810	1310	420	139	52
20	58	52	50	40	32	38	281	1910	1160	389	158	52
21	59	54	50	40	32	36	287	1970	1150	372	190	55
22	67	54	50	40	34	34	290	1910	1280	399	179	54
23	66	54	50	39	35	32	296	1970	1320	375	150	54
24	66	56	49	39	37	32	305	2090	1350	450	127	54
25	68	56	48	38	37	32	307	2100	1400	402	113	54
26	61	56	48	37	38	33	301	2070	1480	338	105	54
27	57	56	47	36	38	38	297	2130	1510	296	99	60
28	58	54	47	36	39	43	322	2450	1460	274	94	62
29	58	54	47	36	---	46	334	2350	1420	252	90	58
30	60	54	47	35	---	46	357	1700	1410	225	86	55
31	60	---	46	35	---	45	---	1380	---	209	89	---
TOTAL	1891	1603	1585	1253	936	1279	4879	38820	47460	20156	4350	1820
MEAN	61.0	53.4	51.1	40.4	33.4	41.3	163	1252	1582	650	140	60.7
MAX	68	60	54	45	39	50	357	2450	2650	1440	202	85
MIN	56	47	46	35	29	32	39	378	1150	209	86	52
AC-FT	3750	3180	3140	2490	1860	2540	9680	77000	94140	39980	8630	3610

CAL YR 1978 TOTAL 160353 MEAN 439 MAX 3260 MIN 40 AC-FT 318100
WTR YR 1979 TOTAL 126032 MEAN 345 MAX 2650 MIN 29 AC-FT 250000

09243700 MIDDLE CREEK NEAR OAK CREEK, CO

LOCATION.--Lat 40°23'08", long 106°59'33", in SW¼SW¼ sec.13, T.5 N., R.85 W., Routt County, Hydrologic Unit 14050001, on left bank 1.1 mi (1.77 km) above mouth of Foidel Creek and 13.5 mi (21.7 km) northwest of Oak Creek.

DRAINAGE AREA.--23.5 mi² (60.9 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1975 to current year.

GAGE.--Water-stage recorder. Datum of gage is 6,720 ft (2.050 m), National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter period, which are fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 51 ft³/s (1.44 m³/s) May 18, 1979, gage height, 2.37 ft (0.722 m); no flow many days each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge 51 ft³/s (1.44 m³/s) May 18, gage height, 2.37 ft (0.722 m), only peak above base of 15 ft³/s (0.42 m³/s); no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.27	.30	.31	.31	2.0	19	10	2.7	.26	.17
2	.00	.00	.56	.30	.31	.32	1.9	20	9.1	2.4	.17	.12
3	.00	.00	.48	.30	.31	.37	1.9	32	7.4	2.4	.36	.12
4	.00	.00	.56	.30	.31	.39	1.9	24	7.1	4.0	.32	.06
5	.00	.00	.40	.30	.31	.41	1.5	22	6.7	4.4	.31	.03
6	.00	.00	.56	.30	.31	.43	3.8	23	6.3	3.7	.30	.02
7	.00	.04	.40	.30	.31	.45	5.7	30	7.4	3.7	.30	.01
8	.00	.04	.48	.30	.31	.47	6.1	32	7.4	3.5	.30	.01
9	.00	.27	.40	.30	.31	.50	5.3	34	6.9	3.5	.30	.00
10	.00	.56	.40	.30	.31	.55	4.9	37	5.5	4.1	.30	.00
11	.00	.34	.34	.30	.31	.60	3.1	29	4.9	2.5	.30	1.1
12	.00	.34	.34	.30	.31	.75	3.8	29	4.4	2.3	.30	1.4
13	.00	.09	.27	.30	.31	.88	3.8	27	3.8	2.7	.33	.10
14	.00	.48	.28	.30	.31	1.0	4.1	29	3.4	3.1	.33	.06
15	.00	.27	.28	.30	.31	1.3	7.1	33	3.4	2.7	.41	.03
16	.00	.21	.28	.30	.31	2.4	11	41	3.1	2.4	.41	.02
17	.00	.40	.28	.30	.31	2.9	15	46	2.7	2.7	.41	.01
18	.00	.30	.28	.30	.31	4.4	20	46	2.5	2.6	.72	.01
19	.00	.30	.29	.30	.31	2.7	16	47	2.5	3.1	1.1	.00
20	.00	.40	.29	.30	.31	2.5	13	45	2.9	3.5	1.8	.00
21	.00	.27	.29	.30	.31	2.4	14	44	2.2	3.7	1.4	.00
22	.00	.27	.29	.30	.31	.84	14	37	2.1	3.1	.78	.00
23	.00	.21	.29	.30	.31	1.1	16	32	1.9	2.7	.53	.00
24	.00	.09	.29	.30	.31	1.0	19	27	1.6	2.7	.41	.00
25	.00	.15	.29	.30	.31	1.2	20	27	1.7	2.4	.37	.00
26	.00	.21	.29	.30	.31	1.3	19	21	2.2	2.1	.26	.00
27	.00	.15	.30	.30	.31	1.3	18	18	2.6	3.5	.22	.00
28	.00	.04	.30	.30	.31	1.4	18	17	2.5	3.2	.22	.00
29	.00	.04	.30	.30	---	1.7	18	16	2.5	.84	.17	.00
30	.00	.15	.30	.30	---	1.6	18	14	2.7	.53	.15	.00
31	.00	---	.30	.30	---	1.5	---	11	---	.37	.29	---
TOTAL	.00	5.62	10.68	9.30	8.68	38.97	305.9	909	129.4	87.14	10.83	3.27
MEAN	.000	.19	.34	.30	.31	1.25	10.2	29.3	4.31	2.81	.35	.11
MAX	.00	.56	.56	.30	.31	4.4	20	47	10	4.4	1.8	1.4
MIN	.00	.00	.27	.30	.31	.31	1.5	11	1.6	.37	.30	.00
AC-FT	.00	11	21	18	17	77	607	1800	257	173	21	6.5

CAL YR 1978 TOTAL 1296.59 MEAN 3.55 MAX 30 MIN .00 AC-FT 2570
WTR YR 1979 TOTAL 1518.79 MEAN 4.16 MAX 47 MIN .00 AC-FT 3010

NOTE.--NO GAGE-HEIGHT RECORD DEC. 14 TO MAR. 15.

09243700 MIDDLE CREEK NEAR OAK CREEK, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--September 1975 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1976 to current year.
WATER TEMPERATURES: April 1976 to current year.

INSTRUMENTATION.--Water-quality monitor since April 1976.

REMARKS.--Daily maximum and minimum specific-conductance data available in district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 872 micromhos Nov. 28, 1976; minimum, 117 micromhos Aug. 10, 1978.
WATER TEMPERATURES: Maximum, 31.5°C July 31, 1976; minimum, freezing point on many days during winter months.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum not determined; minimum, 355 micromhos June 27.
WATER TEMPERATURES: Maximum not determined; minimum, 0.0°C on many days during November to April.

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
NOV 21...	1200	.18	780	8.1	1.5	--	360	93	83	36
APR 27...	1230	18	408	7.9	6.0	--	170	49	41	17
MAY 23...	1130	34	410	7.7	11.5	--	210	61	49	21
JUN 27...	1215	2.6	355	7.9	18.0	--	170	35	40	16
AUG 15...	1200	.56	700	8.2	18.0	8.6	330	63	76	35

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
NOV 21...	38	.9	3.5	320	0	260	170	5.8	.2	8.6
APR 27...	15	.5	2.6	150	0	120	71	3.9	.2	9.5
MAY 23...	11	.3	19	180	0	150	--	--	--	--
JUN 27...	13	.4	1.8	160	0	130	63	1.8	.2	8.0
AUG 15...	37	.9	3.8	330	0	270	130	4.6	.2	8.5

09243700 MIDDLE CREEK NEAR OAK CREEK, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	BORON, DIS-SOLVED (UG/L AS B)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
NOV 21...	504	.69	.24	.25	.01	70	130	10	150	140
APR 27...	238	.32	11.6	.85	.03	50	4800	20	240	60
MAY 23...	190	.26	17.4	.19	.00	--	3900	160	180	80
JUN 27...	223	.30	1.58	.00	.01	30	7200	10	140	20
AUG 15...	458	.62	.69	.00	.01	80	380	10	130	120

DATE	TIME	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)
APR 27...	1230	4100	0	1	0	0	<1	2	2	17	2	.0
MAY 23...	1130	2700	80	1	1	0	1	7	1	33	0	.0
AUG 15...	1200	260	0	1	1	0	<1	2	2	3	0	.0

DATE	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)
APR 27...	.0	0	<10	9	0	1	1	30	<3	15	10
MAY 23...	.0	2	0	6	7	2	1	30	10	11	8.4
AUG 15...	.1	0	<10	3	4	0	0	0	<3	12	9.5

DATE	TIME	PHOS-PHORUS, TOTAL IN BOT. MAT. (MG/KG AS P)	ALUM-INUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS)	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CD)	CHRO-MIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	COBALT, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CO)	COPPER, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CU)
JUL 19...	0800	470	2500	5	0	10	0	8

DATE	IRON, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS FE)	LEAD, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS PB)	MANGA-NESE, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	MERCURY RECOV. FM BOT-TOM MA-TERIAL (UG/G AS HG)	SELE-NIUM, TOTAL IN BOT-TOM MA-TERIAL (UG/G)	ZINC, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS ZN)	CARBON, ORGANIC TOT. IN BOTTOM MAT. (G/KG AS C)	CARBON, INOR-GANIC, TOT IN BOT MAT (G/KG AS C)
JUL 19...	5800	10	360	.01	0	21	4.9	.2

09243700 MIDDLE CREEK NEAR OAK CREEK, CO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1						---	513	384				
2						---	518	372				
3						---	519	405				
4						---	507	399				
5						---	479	390				
6						---	---	384				
7						---	---	392				
8						---	---	413				
9						---	---	380				
10						---	---	378				
11						---	---	379				
12						---	---	378				
13						---	---	384				
14						535	---	386				
15						531	---	387				
16						521	---	388				
17						521	---	390				
18						526	---	392				
19						525	---	393				
20						524	---	398				
21						518	---	399				
22						522	---	404				
23						517	---	409				
24						512	---	419				
25						505	---	427				
26						507	---	433				
27						494	386	443				
28						495	383	435				
29						497	382	401				
30						498	385	410				
31						506	---	433				

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1			---	---	.5	.0					---	---
2			---	---	.5	.0					---	---
3			---	---	.5	.0					---	---
4			---	---	.5	.0					---	---
5			---	---	.0	.0					---	---
6			---	---	.0	.0					---	---
7			8.0	.5	.5	.0					---	---
8			8.5	.0	.5	.0					---	---
9			8.5	.0	.5	.0					---	---
10			6.0	1.0	.5	.0					---	---
11			6.0	.0	.0	.0					---	---
12			6.0	.5	.5	.0					---	---
13			4.0	.0	.5	.0					---	---
14			5.5	.0	---	---					3.5	.5
15			6.5	.0	---	---					2.0	.5
16			6.0	.5	---	---					3.5	.5
17			3.5	.0	---	---					2.5	.5
18			2.5	.0	---	---					5.5	.5
19			3.5	.0	---	---					5.0	.5
20			3.0	.0	---	---					4.5	.0
21			2.0	.0	---	---					3.5	.0
22			3.0	.0	---	---					6.5	.0
23			4.0	.0	---	---					7.5	.0
24			1.5	.0	---	---					7.0	.0
25			1.5	.0	---	---					7.0	.0
26			2.0	.0	---	---					5.0	.0
27			1.5	.0	---	---					5.0	.0
28			.5	.0	---	---					4.0	.0
29			.5	.0	---	---					6.0	.0
30			.5	.0	---	---					3.0	.0
31			---	---	---	---					6.0	.0

09243700 MIDDLE CREEK NEAR OAK CREEK, CO--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	5.5	.0	10.5	6.5	18.5	6.5						
2	6.5	.0	9.0	5.0	20.0	7.5						
3	5.5	.0	6.5	2.5	20.5	8.0						
4	11.0	.0	14.0	2.0	20.5	10.0						
5	5.5	.0	13.0	5.5	---	---						
6	5.5	.0	11.5	4.0	---	---						
7	6.0	.0	4.0	2.5	---	---						
8	8.0	.0	7.5	1.0	---	---						
9	5.5	.0	11.0	3.5	---	---						
10	---	---	8.0	3.0	---	---						
11	---	---	9.0	3.0	---	---						
12	---	---	11.0	2.5	---	---						
13	---	---	13.5	4.0	---	---						
14	---	---	15.5	6.5	---	---						
15	---	---	15.0	7.0	---	---						
16	---	---	12.5	7.5	---	---						
17	---	---	14.0	6.0	---	---						
18	---	---	15.5	8.5	---	---						
19	---	---	17.5	7.0	---	---						
20	---	---	18.0	8.0	---	---						
21	---	---	18.0	8.5	---	---						
22	---	---	18.0	9.0	---	---						
23	---	---	19.0	8.5	---	---						
24	---	---	16.5	2.0	---	---						
25	---	---	18.5	10.0	---	---						
26	---	---	20.0	9.5	---	---						
27	13.5	8.0	18.0	10.5	---	---						
28	10.0	5.5	16.0	11.5	---	---						
29	13.5	3.0	12.0	9.0	---	---						
30	11.5	4.0	15.0	7.0	---	---						
31	---	---	16.5	7.0	---	---						

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)
MAY				
23...	1130	34	267	25
JUN				
27...	1230	3.8	416	4.3
AUG				
15...	1220	.60	36	.06

09243800 FOIDEL CREEK NEAR OAK CREEK, CO

LOCATION.--Lat 40°20'45", long 107°05'04", in NW¼SW¼ sec.31, T.5 N., R.86 W., Routt County, Hydrologic Unit 14050001, on right bank 2.3 mi (3.7 km) downstream from Reservoir No. 1, 6.9 mi (11.1 km) upstream from mouth, and 8.7 mi (14 km) northwest of Oak Creek.

DRAINAGE AREA.--8.61 mi^2 (22.30 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1975 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,880 ft (2,110 m), from topographic map.

REMARKS.--Records poor. Numerous beaver dams above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 32 ft^3/s (0.906 m^3/s) Apr. 18, 1979, gage height, 3.09 ft (0.942 m); no flow many days most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 32 ft^3/s (0.906 m^3/s) at 1800 Apr. 18, gage height, 3.09 ft (0.942 m); no flow Oct. 1 to Feb. 10, July 26 to Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.25	.44	5.7	.90	.05	.00	.00
2	.00	.00	.00	.00	.00	.40	.38	8.0	.80	.07	.00	.00
3	.00	.00	.00	.00	.00	.35	.38	12	.68	.06	.00	.00
4	.00	.00	.00	.00	.00	.30	.41	7.1	.56	.06	.00	.00
5	.00	.00	.00	.00	.00	.24	1.0	5.9	.53	.06	.00	.00
6	.00	.00	.00	.00	.00	.15	4.7	5.5	.65	.05	.00	.00
7	.00	.00	.00	.00	.00	.20	6.1	8.2	1.1	.05	.00	.00
8	.00	.00	.00	.00	.00	.55	6.9	10	1.1	.05	.00	.00
9	.00	.00	.00	.00	.00	.42	6.9	15	.90	.04	.00	.00
10	.00	.00	.00	.00	.00	.15	6.8	13	.65	.04	.00	.00
11	.00	.00	.00	.00	.01	.05	4.1	9.1	.47	.04	.00	.00
12	.00	.00	.00	.00	.01	.03	3.3	8.2	.38	.04	.00	.00
13	.00	.00	.00	.00	.01	.03	3.9	6.9	.30	.03	.00	.00
14	.00	.00	.00	.00	.01	.05	5.9	6.1	.26	.03	.00	.00
15	.00	.00	.00	.00	.02	.25	12	6.4	.24	.03	.00	.00
16	.00	.00	.00	.00	.02	.70	15	7.8	.18	.03	.00	.00
17	.00	.00	.00	.00	.03	.70	16	7.8	.14	.03	.00	.00
18	.00	.00	.00	.00	.08	.68	19	6.9	.12	.02	.00	.00
19	.00	.00	.00	.00	.09	.80	15	6.1	.15	.02	.00	.00
20	.00	.00	.00	.00	.10	.90	14	4.9	.17	.01	.00	.00
21	.00	.00	.00	.00	.10	1.0	14	3.9	.13	.01	.00	.00
22	.00	.00	.00	.00	.11	1.2	14	3.1	.09	.00	.00	.00
23	.00	.00	.00	.00	.12	1.4	14	2.4	.09	.00	.00	.00
24	.00	.00	.00	.00	.13	1.3	12	2.3	.08	.00	.00	.00
25	.00	.00	.00	.00	.14	1.1	12	2.9	.07	.00	.00	.00
26	.00	.00	.00	.00	.15	.85	9.3	1.9	.08	.00	.00	.00
27	.00	.00	.00	.00	.18	1.1	8.4	1.9	.05	.00	.00	.00
28	.00	.00	.00	.00	.20	.90	8.4	2.0	.05	.00	.00	.00
29	.00	.00	.00	.00	---	.77	7.3	1.8	.04	.00	.00	.00
30	.00	.00	.00	.00	---	.59	6.4	1.6	.04	.00	.00	.00
31	.00	---	.00	.00	---	.59	---	1.1	---	.00	.00	---
TOTAL	.00	.00	.00	.00	1.51	18.00	248.01	185.5	11.00	.82	.00	.00
MEAN	.000	.000	.000	.000	.054	.58	8.27	5.98	.37	.026	.000	.000
MAX	.00	.00	.00	.00	.20	1.4	19	15	1.1	.07	.00	.00
MIN	.00	.00	.00	.00	.00	.03	.38	1.1	.04	.00	.00	.00
AC-FT	.00	.00	.00	.00	3.0	36	492	368	22	1.6	.00	.00

CAL YR 1978 TOTAL 288.81 MEAN .79 MAX 17 MIN .00 AC-FT 573
WTR YR 1979 TOTAL 464.84 MEAN 1.27 MAX 19 MIN .00 AC-FT 922

NOTE.--NO GAGE-HEIGHT RECORD FEB. 12 TO MAR. 27.

09243800 FOIDEL CREEK NEAR OAK CREEK, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--September 1975 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: May 1976 to current year.
WATER TEMPERATURES: May 1976 to current year.

INSTRUMENTATION.--Water-quality monitor since May 1976.

REMARKS.--Daily maximum and minimum specific-conductance data available in district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 1,240 micromhos May 19, 1977; minimum, 208 micromhos May 15, 1976.
WATER TEMPERATURES: Maximum, 24.5°C June 19, 1976; minimum, 0.0°C during March and April each year.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 880 micromhos Apr. 3; minimum, 257 micromhos Apr. 18.
WATER TEMPERATURES: Maximum, 22.0°C June 28; minimum, 0.0°C on several days during March and April.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
APR										
09...	1230	5.3	520	7.6	5.0	250	100	57	26	16
JUN										
29...	1105	.04	769	7.2	15.0	330	--	70	38	26

DATE	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-, SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
APR										
09...	.4	3.1	180	0	150	130	4.4	.2	7.6	336
JUN										
29...	.6	2.7	--	0	--	100	4.0	.3	11	--

DATE	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	BORON, DIS-SOLVED (UG/L AS B)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
APR									
09...	.46	4.81	.64	.12	60	2300	50	60	20
JUN									
29...	.61	--	.00	.00	100	1100	130	340	260

09243800 FOIDEL CREEK NEAR OAK CREEK, CO--Continued

DATE	TIME	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)
APR											
09...	1230	1500	0	2	1	3	0	12	2	29	6

DATE	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)	CARBON, ORGANIC DISSOLVED (MG/L AS C)
APR											
09...	.1	.1	0	0	7	1	1	2	40	10	17

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1						---	814	658	598	701		
2						---	832	683	592	679		
3						---	850	643	594	677		
4						---	867	606	598	679		
5						---	798	618	608	676		
6						---	560	655	603	683		
7						---	489	661	624	682		
8						---	449	659	620	685		
9						---	460	582	648	698		
10						---	507	465	636	713		
11						---	585	478	626	714		
12						---	625	499	627	714		
13						---	668	522	627	718		
14						---	610	558	626	723		
15						---	447	611	621	720		
16						---	376	666	603	722		
17						---	323	---	612	726		
18						---	304	---	613	729		
19						---	353	---	610	731		
20						---	388	---	594	735		
21						578	377	---	600	736		
22						662	357	---	613	---		
23						693	371	530	618	---		
24						717	376	538	620	---		
25						711	381	563	617	---		
26						667	394	570	617	---		
27						691	422	572	636	---		
28						715	463	572	673	---		
29						732	503	579	687	---		
30						760	585	590	710	---		
31						777	---	584	---	---		

09243800 FOIDEL CREEK NEAR OAK CREEK, CO--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1											---	---
2											---	---
3											---	---
4											---	---
5											---	---
6											---	---
7											---	---
8											---	---
9											---	---
10											---	---
11											---	---
12											---	---
13											---	---
14											1.0	.5
15											1.0	.0
16											.5	.0
17											.0	.0
18											.0	.0
19											.5	.0
20											1.0	.0
21											1.0	.0
22											.5	.0
23											1.0	.0
24											3.5	.0
25											4.0	.5
26											3.5	.5
27											4.0	.5
28											4.0	.5
29											5.5	2.0
30											6.5	2.5
31											4.5	2.5

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	4.5	1.0	10.5	6.0	15.0	7.5	19.0	14.5				
2	5.5	.5	8.0	4.0	16.0	9.0	20.5	14.5				
3	9.5	.5	8.0	3.0	16.5	10.5	18.5	15.0				
4	7.5	2.5	14.0	2.0	19.0	12.0	20.0	14.0				
5	11.5	4.0	13.0	5.0	19.0	13.0	20.5	13.5				
6	12.0	2.0	10.5	4.5	19.0	14.0	16.0	13.5				
7	9.5	1.5	4.5	2.5	15.5	12.0	20.5	12.0				
8	11.0	1.0	7.5	1.5	12.0	9.0	19.5	13.5				
9	8.5	.5	11.0	3.0	13.0	8.0	20.5	13.0				
10	5.0	.0	7.5	2.5	16.0	9.0	19.5	11.0				
11	1.0	.0	8.5	2.5	18.5	12.0	19.5	11.5				
12	3.5	.0	11.0	2.5	20.0	13.5	20.5	12.5				
13	5.5	.0	14.0	4.0	20.0	15.0	20.5	13.0				
14	12.5	1.0	15.0	6.0	19.0	15.5	20.0	12.5				
15	11.0	1.0	16.5	7.0	18.5	14.5	18.5	13.5				
16	11.5	1.0	14.5	7.5	19.0	13.0	18.5	13.5				
17	10.0	2.0	15.5	6.0	19.0	13.0	19.0	14.0				
18	12.0	2.0	17.5	8.5	17.0	13.5	18.0	14.0				
19	9.0	1.0	19.0	8.0	14.0	10.5	20.0	12.0				
20	13.5	1.0	19.0	8.5	16.5	9.0	19.5	13.0				
21	11.5	1.0	17.5	9.5	18.0	11.5	18.5	13.5				
22	13.0	2.0	18.0	9.5	19.5	12.0	---	---				
23	13.0	3.0	19.0	9.0	19.5	14.0	---	---				
24	10.0	4.0	16.5	11.0	20.0	13.0	---	---				
25	10.0	3.0	17.0	11.0	18.5	13.5	---	---				
26	12.5	2.5	19.0	10.5	20.0	13.5	---	---				
27	13.0	3.0	16.5	12.5	21.0	14.0	---	---				
28	10.5	5.5	16.5	12.5	22.0	14.5	---	---				
29	12.5	3.0	14.0	9.0	21.0	14.5	---	---				
30	11.0	4.0	13.5	7.5	19.5	15.0	---	---				
31	---	---	12.5	7.5	---	---	---	---				

09243900 FOIDEL CREEK AT MOUTH, NEAR OAK CREEK, CO

LOCATION.--Lat 40°23'25", long 106°59'39", in SE¼SE¼ sec.14, T.5 N., R.86 W., Routt County, Hydrologic Unit 14050001, on left bank 0.9 mi (1.4 km) upstream from mouth and 13.6 mi (21.9 km) northwest of Oak Creek.

DRAINAGE AREA.--17.5 mi² (45.3 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1975 to current year.

REVISED RECORDS.--WDR CO-78-3: 1976 (M), 1976.

GAGE.--Water-stage recorder. Altitude of gage is 6,730 ft (2,051 m), from topographic map.

REMARKS.--Records good except those for winter period and those for period of no gage-height record, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 69 ft³/s (1.95 m³/s) Mar. 29, 1976, gage height, 4.84 ft (1.475 m); maximum gage height, 6.00 ft (1.829 m) Mar. 25, 1976 (backwater from ice); no flow many days each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 35 ft³/s (0.991 m³/s) at 1700 Apr. 18, gage height, 4.13 ft (1.259 m); no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	2.5	1.8	5.2	3.2	.49	.56	.02
2	.00	.00	.00	.00	.00	3.0	2.0	5.8	2.5	.55	.46	.02
3	.00	.00	.00	.00	.00	2.5	3.0	22	2.4	.43	.38	.01
4	.00	.00	.00	.00	.00	2.0	5.0	18	2.4	.37	.31	.01
5	.00	.00	.00	.00	.00	1.5	7.0	12	2.3	.30	.26	.01
6	.00	.00	.00	.00	.00	1.0	9.6	10	2.2	.22	.23	.01
7	.00	.00	.00	.00	.00	4.5	17	13	2.5	.26	.20	.01
8	.00	.00	.00	.00	.00	4.5	20	20	2.8	.19	.18	.01
9	.00	.00	.00	.00	.00	2.5	16	24	2.8	.14	.16	.01
10	.00	.00	.00	.00	.02	.60	13	28	2.2	.08	.14	.01
11	.00	.00	.00	.00	.04	.30	7.5	26	1.9	.05	.12	.01
12	.00	.00	.00	.00	.04	.20	4.6	24	1.7	.03	.10	.01
13	.00	.00	.00	.00	.04	.20	5.5	22	1.4	.03	.08	.00
14	.00	.00	.00	.00	.06	1.0	7.0	20	1.4	.08	.06	.00
15	.00	.00	.00	.00	.06	3.5	12	18	1.2	.49	.04	.00
16	.00	.00	.00	.00	.04	5.5	22	16	.95	.85	.02	.00
17	.00	.00	.00	.00	.06	5.0	26	14	.95	1.2	.02	.00
18	.00	.00	.00	.00	.06	5.0	29	12	.85	1.4	.02	.00
19	.00	.00	.00	.00	.04	6.0	28	10	.65	1.6	.02	.00
20	.00	.00	.00	.00	.06	7.0	20	8.0	.95	1.4	.02	.00
21	.00	.00	.00	.00	.08	8.0	20	7.0	.75	2.5	.05	.01
22	.00	.00	.00	.00	.08	9.0	18	6.0	.65	2.3	.26	.00
23	.00	.00	.00	.00	.06	10	18	5.6	.49	2.3	.19	.00
24	.00	.00	.00	.00	.10	9.0	17	5.0	.49	2.2	.10	.01
25	.00	.00	.00	.00	.04	7.0	14	6.0	.85	2.2	.05	.01
26	.00	.00	.00	.00	.04	7.0	11	5.0	1.0	2.0	.03	.01
27	.00	.00	.00	.00	.50	8.0	7.7	3.6	.95	4.3	.03	.01
28	.00	.00	.00	.00	1.5	6.6	7.5	4.3	.95	2.7	.02	.01
29	.00	.00	.00	.00	---	7.9	6.7	4.6	.65	2.0	.02	.01
30	.00	.00	.00	.00	---	4.6	5.6	4.0	.49	1.2	.02	.01
31	.00	---	.00	.00	---	3.5	---	3.2	---	.72	.02	---
TOTAL	.00	.00	.00	.00	2.92	138.90	381.5	382.3	44.52	34.58	4.17	.22
MEAN	.000	.000	.000	.000	.10	4.48	12.7	12.3	1.48	1.12	.13	.007
MAX	.00	.00	.00	.00	1.5	10	29	28	3.2	4.3	.56	.02
MIN	.00	.00	.00	.00	.00	.20	1.8	3.2	.49	.03	.02	.00
AC-FT	.00	.00	.00	.00	5.8	276	757	758	88	69	8.3	.4

CAL YR 1978 TOTAL 832.14 MEAN 2.28 MAX 28 MIN .00 AC-FT 1650
WTR YR 1979 TOTAL 989.11 MEAN 2.71 MAX 29 MIN .00 AC-FT 1960

NOTE.--NO GAGE-HEIGHT RECORD DEC. 13 TO FEB. 19.

09243900 FOIDEL CREEK AT MOUTH, NEAR OAK CREEK, CO--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1976 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1976 to current year.
WATER TEMPERATURE: April 1976 to current year.

INSTRUMENTATION.--Water-quality monitor since April 1976.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 2,840 micromhos July 26, 1979; minimum, 283 micromhos Apr. 18, 1979.
WATER TEMPERATURES: Maximum, 27.5°C on June 10, 1976; minimum, 0.0°C several days during March and April 1979.
SEDIMENT CONCENTRATIONS: Maximum daily, 1,120 mg/L July 27, 1979; no flow many days each year.
SEDIMENT LOADS: Maximum daily, 57 tons (52 t) Apr. 18, 1979; no flow many days each year.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 2,840 micromhos July 26; minimum, 283 micromhos Apr. 18.
WATER TEMPERATURES: Maximum, 24.5°C on Aug. 15; minimum, 0.0°C several days during March and April.
SEDIMENT CONCENTRATIONS: Maximum daily, 1,120 mg/L July 27; no flow many days during year.
SEDIMENT LOADS: Maximum daily, 57 tons (52 t) Apr. 18; no flow many days during year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
MAR 23...	2145	10	1080	7.2	.0	10.2	480	290	110	51
APR 09...	1015	13	675	7.4	5.5	--	300	150	69	30
MAY 23...	1100	6.0	650	7.8	13.0	--	310	93	73	32
JUN 27...	1100	1.1	1600	8.0	16.0	--	890	680	190	100
AUG 15...	1045	.02	1900	8.0	16.0	12.2	1100	790	250	110

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
MAR 23...	68	1.3	5.6	240	0	200	400	13	.2	7.8
APR 09...	37	.9	3.5	180	0	150	200	6.7	.3	7.6
MAY 23...	24	.6	2.7	270	0	220	120	8.9	.3	2.6
JUN 27...	56	.8	4.1	250	0	210	730	10	.2	2.1
AUG 15...	60	.8	5.8	350	0	290	930	8.9	.2	5.7

DATE	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	BORON, DIS-SOLVED (UG/L AS B)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
MAR 23...	786	1.07	21.6	2.6	.02	110	520	70	150	120
APR 09...	450	.61	16.3	1.4	.12	90	6300	40	160	70
MAY 23...	406	.55	6.60	2.0	.00	60	650	10	140	110
JUN 27...	1230	1.67	3.72	3.9	.01	140	340	70	200	180
AUG 15...	1550	2.11	.08	.33	.00	120	460	30	1400	1500

09243900 FOIDEL CREEK AT MOUTH, NEAR OAK CREEK, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)
MAR 23...	2145	340	20	1	1	1	0	5	0	12	0	.0
APR 09...	1015	4200	0	2	1	5	1	23	19	29	6	.1
MAY 23...	1100	410	0	--	--	--	--	--	--	14	0	--
AUG 15...	1045	270	0	1	1	0	<1	2	2	3	0	.0

DATE	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)
MAR 23...	.0	2	0	14	2	2	1	20	10	10	10
APR 09...	.0	1	0	13	2	2	1	90	30	17	11
MAY 23...	--	--	--	--	--	--	--	30	10	11	12
AUG 15...	.0	0	<10	3	6	1	1	10	<3	9.1	9.7

DATE	TIME	PHOS-PHORUS, TOTAL IN BOT. MAT. (MG/KG AS P)	ALUM-INUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS)	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CD)	CHRO-MIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	COBALT, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CO)	COPPER, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CU)
JUL								
18...	0900	650	3600	5	0	6	5	10
18...	0910	850	1100	11	0	3	0	3
18...	0920	600	1500	6	0	5	0	10
18...	0930	460	3100	4	0	5	7	7
18...	0940	650	3300	3	0	7	5	9
18...	0950	750	4300	8	0	9	10	19
18...	1000	650	4500	7	0	9	10	17
18...	1010	600	2400	7	0	4	5	12
18...	1020	500	4000	4	0	8	7	10
18...	1030	450	3100	5	0	5	0	8
18...	1040	650	2500	6	0	4	7	15
18...	1050	650	4100	7	0	10	8	17
18...	1100	650	2600	5	0	5	10	12
18...	1110	500	3100	5	0	6	5	10
19...	0800	550	2700	2	0	4	5	7
19...	0900	600	2600	3	0	4	0	5
19...	1000	600	3400	2	0	5	2	7
19...	1100	600	3900	2	0	6	5	8

09243900 FOIDEL CREEK AT MOUTH, NEAR OAK CREEK, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	IRON, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS FE)	LEAD, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS PB)	MANGA-NESE, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	MERCURY RECOV. FM BOT-TOM MA-TERIAL (UG/G AS HG)	SELE-NIUM, TOTAL IN BOT-TOM MA-TERIAL (UG/G)	ZINC, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS ZN)	CARBON, ORGANIC TOT. IN BOTTOM MAT. (G/KG AS C)	CARBON, INOR-GANIC, TOT IN BOT MAT (G/KG AS C)
JUL								
18...	9600	5	390	.02	0	66	57	.1
18...	430	0	390	.02	0	6	65	.1
18...	9300	10	340	.02	0	34	42	3.2
18...	6000	5	480	.01	0	38	52	.1
18...	6400	7	400	.02	0	38	46	.1
18...	11000	15	500	.02	0	54	59	.1
18...	8500	20	290	.02	0	39	34	.1
18...	9600	8	600	.02	0	39	22	.3
18...	6200	10	360	.02	0	19	23	.1
18...	5200	8	200	.02	0	18	5.1	.3
18...	7200	15	280	.02	0	35	32	1.0
18...	7200	18	390	.02	0	43	37	.0
18...	9100	10	230	.01	0	53	59	2.6
18...	8500	8	380	.02	0	33	12	1.6
19...	5300	12	360	.02	0	30	45	.0
19...	4700	7	370	.02	0	29	43	.1
19...	6100	7	370	.02	0	35	44	.1
19...	7400	0	350	.02	0	39	41	.1

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1						---	1180	591	1160	1530	2570	
2						---	1160	603	763	1520	2690	
3						---	1200	1050	712	1630	2760	
4						---	1260	1250	698	1620	2710	
5						---	1350	1500	678	1550	2780	
6						---	1110	1570	670	1500	2630	
7						---	794	1500	658	1450	2460	
8						---	603	1270	710	1430	2230	
9						---	657	1130	705	1460	2160	
10						---	719	952	719	1420	2180	
11						---	873	705	678	1350	2170	
12						---	1130	680	663	1250	2190	
13						978	1170	688	652	1150	2120	
14						998	935	690	660	1750	2140	
15						996	686	1290	675	2710	1980	
16						982	517	1210	677	2700	1650	
17						957	448	653	677	2710	1800	
18						977	384	621	690	2690	1800	
19						1050	619	614	729	2630	1850	
20						975	794	611	761	2710	1700	
21						995	829	628	736	2640	1460	
22						1110	869	641	735	2670	1430	
23						1150	876	652	762	2740	1480	
24						1140	896	662	763	2720	1680	
25						1150	869	665	762	2760	1870	
26						1180	532	680	1130	2780	1750	
27						1140	552	694	1600	2490	1790	
28						1120	556	696	1660	2220	1660	
29						1030	548	691	1660	2550	---	
30						1090	580	703	1610	2780	---	
31						1100	---	702	---	2750	---	

09243900 FOIDEL CREEK AT MOUTH, NEAR OAK CREEK, CO--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1											---	---
2											---	---
3											---	---
4											---	---
5											---	---
6											---	---
7											---	---
8											---	---
9											---	---
10											---	---
11											---	---
12											---	---
13											2.5	2.0
14											2.5	1.5
15											2.5	1.5
16											2.0	1.5
17											3.0	1.0
18											1.5	.5
19											1.0	.5
20											1.0	.0
21											1.0	.5
22											.5	.0
23											1.0	.0
24											1.0	.0
25											---	---
26											---	---
27											2.5	.0
28											6.5	.0
29											7.0	1.0
30											8.5	1.0
31											5.5	1.5

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	8.0	.0	11.5	7.0	17.5	7.5	19.5	12.0	21.0	10.0		
2	8.0	.0	10.0	6.0	18.0	8.0	21.0	12.0	20.5	13.5		
3	8.0	.0	6.5	3.0	18.0	9.0	20.0	11.0	21.5	11.5		
4	6.5	1.0	15.0	2.0	20.0	10.0	21.5	11.0	20.5	12.0		
5	12.5	2.5	14.5	6.0	19.5	11.0	22.0	9.5	20.5	14.5		
6	11.0	.0	12.0	4.5	19.5	12.0	17.0	10.0	22.5	11.5		
7	11.0	.5	5.0	2.5	15.0	10.5	22.0	9.5	22.5	12.0		
8	12.0	.5	8.0	1.0	10.5	8.5	22.5	10.0	21.0	12.5		
9	11.0	1.0	10.5	4.0	11.5	7.0	22.5	9.0	23.5	12.5		
10	8.5	.5	8.5	3.5	17.5	6.5	22.5	9.0	23.5	13.5		
11	4.5	.0	9.5	3.0	19.5	9.5	23.0	8.5	22.5	10.0		
12	8.5	.0	11.5	3.0	20.5	11.0	23.5	9.5	21.0	10.0		
13	8.0	.0	15.0	5.0	20.0	12.0	22.5	10.5	19.5	13.0		
14	14.0	1.0	17.0	7.0	18.5	12.0	20.0	11.5	17.0	11.0		
15	15.0	2.5	17.5	8.0	18.5	11.5	20.5	13.5	24.5	11.0		
16	14.0	3.5	14.0	9.0	20.0	8.5	19.5	14.5	19.5	11.0		
17	11.0	4.5	18.0	7.5	18.5	9.5	20.5	14.5	23.5	9.0		
18	13.0	4.5	18.0	9.5	18.0	9.5	19.5	14.5	21.5	11.5		
19	10.0	4.5	20.0	8.5	10.5	8.5	19.5	12.0	15.0	12.0		
20	13.0	2.0	21.0	9.5	17.5	6.5	20.0	13.5	12.0	11.0		
21	12.0	3.5	20.5	10.5	19.0	9.0	18.5	13.5	17.0	10.5		
22	12.0	3.5	20.0	11.0	19.5	10.5	20.5	15.5	18.5	11.5		
23	14.5	5.0	21.5	10.5	20.5	10.5	19.0	14.0	19.5	11.0		
24	12.5	6.0	19.5	10.5	20.0	10.0	20.5	14.5	21.5	12.0		
25	12.0	4.5	20.0	11.0	19.0	11.5	20.5	14.0	22.5	10.0		
26	14.0	3.5	21.5	11.0	19.5	11.5	20.0	13.5	24.0	9.5		
27	15.0	4.0	19.5	11.5	21.0	11.0	20.0	14.0	22.5	9.5		
28	11.0	7.0	17.5	13.0	21.5	12.0	21.0	15.0	20.5	10.0		
29	15.0	3.5	13.5	10.5	22.0	11.5	20.0	14.0	---	---		
30	12.0	5.5	14.5	8.0	19.5	12.5	20.0	13.0	---	---		
31	---	---	16.5	7.5	---	---	21.0	14.0	---	---		

09243900 FOIDEL CREEK AT MOUTH, NEAR OAK CREEK, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JANUARY			FEBRUARY			MARCH	
1	.00			.00		---	2.5	---	.40
2	.00			.00		---	3.0	---	.50
3	.00			.00		---	2.5	---	.40
4	.00			.00		---	2.0	---	.30
5	.00			.00		---	1.5	---	.20
6	.00			.00		---	1.0	---	.15
7	.00			.00		---	4.5	---	.80
8	.00			.00		---	4.5	---	.80
9	.00			.00		---	2.5	---	.40
10	.00			.02		.00	.60	---	.08
11	.00			.04		.00	.30	---	.04
12	.00			.04		.00	.20	---	.04
13	.00			.04		.00	.20	166	.09
14	.00			.06		.00	1.0	116	.31
15	.00			.06		.00	3.5	78	.74
16	.00			.04		.00	5.5	49	.73
17	.00			.06		.00	5.0	54	.73
18	.00			.06		.00	5.0	---	.90
19	.00			.04		.00	6.0	---	1.1
20	.00			.06		.00	7.0	---	1.4
21	.00			.08		.00	8.0	---	1.6
22	.00			.08		.00	9.0	---	1.9
23	.00			.06		.00	10	---	2.2
24	.00			.10		.01	9.0	---	1.9
25	.00			.04		.00	7.0	---	1.4
26	.00			.04		.00	7.0	65	1.2
27	.00			.50		.06	8.0	60	1.3
28	.00			1.5		.20	6.6	60	1.1
29	.00			---			7.9	83	1.8
30	.00			---			4.6	54	.67
31	.00			---			3.5	45	.42
TOTAL	0.00			2.92		0.27	138.90	---	25.60

09243900 FOIDEL CREEK AT MOUTH, NEAR OAK CREEK, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	1.8	38	.18	5.2	59	.83	3.2	104	.90
2	2.0	41	.22	5.8	63	.99	2.5	84	.57
3	3.0	41	.33	22	199	12	2.4	84	.54
4	5.0	42	.57	18	138	6.7	2.4	84	.54
5	7.0	55	1.0	12	83	2.7	2.3	78	.48
6	9.6	148	3.8	10	72	1.9	2.2	78	.46
7	17	238	11	13	131	4.6	2.5	69	.46
8	20	311	17	20	334	18	2.8	69	.52
9	16	294	13	24	268	17	2.8	77	.58
10	13	182	6.4	28	420	32	2.2	58	.34
11	7.5	140	2.8	26	173	12	1.9	54	.28
12	4.6	98	1.2	24	132	8.6	1.7	50	.23
13	5.5	91	1.4	22	144	8.6	1.4	48	.18
14	7.0	106	2.0	20	110	5.9	1.4	68	.26
15	12	176	5.7	18	138	6.7	1.2	108	.35
16	22	546	32	16	155	6.7	.95	91	.23
17	26	611	43	14	116	4.4	.95	67	.17
18	29	732	57	12	93	3.0	.85	68	.16
19	28	721	54	10	69	1.9	.65	72	.13
20	20	511	28	8.0	75	1.6	.95	73	.19
21	20	250	13	7.0	74	1.4	.75	76	.15
22	18	157	7.6	6.0	53	.86	.65	81	.14
23	18	143	6.9	5.6	69	1.0	.49	89	.12
24	17	123	5.6	5.0	90	1.2	.49	107	.14
25	14	99	3.7	6.0	154	2.5	.85	127	.29
26	11	87	2.6	5.0	139	1.9	1.0	142	.38
27	7.7	83	1.7	3.6	131	1.3	.95	90	.23
28	7.5	77	1.6	4.3	132	1.5	.95	50	.13
29	6.7	79	1.4	4.6	108	1.3	.65	27	.05
30	5.6	62	.94	4.0	100	1.1	.49	25	.03
31	---	---	---	3.2	84	.73	---	---	---
TOTAL	381.5	---	325.64	382.3	---	170.91	44.52	---	9.23

09243900 FOIDEL CREEK AT MOUTH, NEAR OAK CREEK, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JULY			AUGUST			SEPTEMBER	
1	.49	---	.05	.56	---	.07	.02	83	.00
2	.55	---	.05	.46	---	.06	.02	57	.00
3	.43	---	.05	.38	---	.05	.01	---	.00
4	.37	---	.05	.31	---	.05	.01	---	.00
5	.30	---	.05	.26	---	.06	.01	---	.00
6	.22	---	.05	.23	---	.03	.01	---	.00
7	.26	---	.05	.20	---	.03	.01	---	.00
8	.19	---	.00	.18	---	.05	.01	---	.00
9	.14	---	.00	.16	---	.05	.01	---	.00
10	.08	---	.00	.14	---	.02	.01	---	.00
11	.05	---	.00	.12	---	.02	.01	---	.00
12	.03	---	.00	.10	---	.02	.01	---	.00
13	.03	---	.00	.08	---	.02	.00	---	.00
14	.08	---	.00	.06	115	.02	.00	---	.00
15	.49	---	.05	.04	145	.02	.00	---	.00
16	.85	---	.10	.02	170	.01	.00	---	.00
17	1.2	---	.15	.02	162	.01	.00	---	.00
18	1.4	---	.20	.02	108	.01	.00	---	.00
19	1.6	---	.20	.02	77	.00	.00	---	.00
20	1.4	---	.20	.02	83	.01	.00	---	.00
21	2.5	325	2.2	.05	142	.10	.01	---	.00
22	2.3	26	.30	.26	141	.07	.00	---	.00
23	2.3	25	.30	.19	120	.03	.00	---	.00
24	2.2	26	.30	.10	142	.02	.01	---	.00
25	2.2	26	.30	.05	193	.02	.01	---	.00
26	2.0	25	.15	.03	186	.02	.01	---	.00
27	4.3	1120	29	.03	168	.01	.01	---	.00
28	2.7	350	2.6	.02	154	.01	.01	---	.00
29	2.0	142	.77	.02	145	.01	.01	---	.00
30	1.2	232	.75	.02	138	.01	.01	---	.00
31	.72	272	.53	.02	117	.01	---	---	---
TOTAL	34.58	---	38.45	4.17	---	0.92	0.22	---	0.00
YEAR	989.11		571.02						

09244410 YAMPA RIVER BELOW DIVERSION, NEAR HAYDEN, CO

LOCATION.--Lat 40°29'18", long 107°09'33", in NW¼SW¼ sec.9, T.6 N., R.87 W., Routt County, Hydrologic Unit 14050001, in bay of Colorado-Ute Electric Co. pumphouse on left bank 300 ft (91 m) downstream from U.S. Highway 40, 0.1 mi (0.2 km) upstream from Sage Creek, 0.5 mi (0.8 km) downstream from diversion point of Gibraltar Canal, and 4.7 mi (7.6 km) east of Hayden.

DRAINAGE AREA.--1,430 mi² (3,700 km²), approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1965 to current year. Prior to October 1972, records included flow in Gibraltar Canal.

GAGE.--Water-stage recorder. Altitude of gage is 5,380 ft (1,945 m), from topographic map.

REMARKS.--Records good except those for winter period, which are fair. Records show flow of river below Gibraltar Canal diversion. Natural flow of stream affected by diversions for irrigation of about 30,000 acres (121 km²) above and 200 acres (809,000 m²) below station, transbasin diversions, storage reservoirs, and return flow from irrigated areas.

AVERAGE DISCHARGE.--14 years, 1,068 ft³/s (30.25 m³/s), 773,800 acre-ft/yr (954 hm³/yr); does not include flow in Gibraltar Canal.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,500 ft³/s (467 m³/s) Apr. 27, 1974, gage height, 11.90 ft (3.627 m), from rating curve extended above 12,000 ft³/s (340 m³/s); minimum daily, 5.1 ft³/s (0.14 m³/s) July 19, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 5,000 ft³/s (142 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
May 29	0700	*11,300	320	10.29	3.136	June 15	----	a8,100	229	unknown	
June 7	1200	8,320	236	9.42	2.871						

a About.

Minimum daily discharge 57 ft³/s (1.61 m³/s) Sept. 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	146	220	176	174	174	178	382	2960	5310	3820	425	154
2	149	215	175	173	174	178	336	3020	5190	3430	394	129
3	147	208	175	173	175	178	302	3330	5430	3200	357	114
4	174	205	174	173	175	178	321	2620	5920	3030	340	98
5	210	200	175	173	175	179	339	2680	6440	2750	319	85
6	166	199	175	172	175	179	422	3380	7030	2460	298	71
7	148	164	176	172	176	179	613	3520	7850	2310	275	69
8	153	176	175	171	177	179	670	3040	6750	2200	253	63
9	153	177	175	171	176	179	843	2780	5580	2060	230	61
10	151	177	175	172	175	179	958	2740	4580	1850	252	65
11	156	176	174	172	175	180	860	2310	4760	1730	452	65
12	153	176	174	172	174	180	682	2210	5520	1610	398	65
13	153	176	174	172	174	180	624	2140	6370	1520	291	59
14	152	175	175	172	173	181	602	2420	7000	1420	314	57
15	149	175	175	171	172	182	915	3210	7600	1310	322	65
16	155	175	175	171	172	182	1470	4010	6600	1200	331	67
17	159	175	174	172	173	185	1990	4490	6280	1160	323	69
18	154	175	174	173	174	190	2620	5240	6020	1100	339	67
19	151	175	174	172	174	195	3100	5990	4550	1010	395	69
20	157	174	175	173	175	205	2660	6330	3870	949	554	65
21	167	174	174	172	175	230	2690	6510	3660	877	714	63
22	261	174	174	173	175	250	2640	6740	4060	867	456	69
23	311	174	174	174	176	280	2990	6740	4190	836	322	71
24	285	174	175	176	176	300	3520	7230	4280	848	248	65
25	271	174	174	175	176	340	3120	7750	4300	830	218	65
26	267	174	174	175	177	400	2630	7750	4220	704	195	71
27	212	174	174	175	177	470	2630	7990	4270	630	177	95
28	216	174	175	175	178	540	2830	8620	4130	618	157	111
29	209	174	174	175	---	620	2720	10300	3990	562	158	100
30	210	175	174	175	---	868	2790	7780	3840	500	154	88
31	214	---	174	174	---	537	---	6140	---	464	155	---
TOTAL	5759	5434	5411	5363	4898	8481	49269	151970	159590	47855	9846	2355
MEAN	186	181	175	173	175	274	1642	4902	5320	1544	318	78.5
MAX	311	220	176	176	178	868	3520	10300	7850	3820	714	154
MIN	146	164	174	171	172	178	302	2140	3660	464	154	57
AC-FT	11420	10780	10730	10640	9720	16820	97730	301400	316500	94920	19530	4670

CAL YR 1978 TOTAL 526024 MEAN 1441 MAX 8990 MIN 92 AC-FT 1043000
WTR YR 1979 TOTAL 456231 MEAN 1250 MAX 10300 MIN 57 AC-FT 904900

09244410 YAMPA RIVER BELOW DIVERSION, NEAR HAYDEN, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--June 1975 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO
OCT												
24...	1020	290	320	7.8	5.0	9.3	130	19	34	10	18	.7
NOV												
08...	1050	180	330	8.3	2.5	10.4	130	19	34	12	21	.8
DEC												
11...	1615	189	315	7.3	.0	9.0	120	12	31	10	21	.8
JAN												
24...	1425	176	317	7.4	.0	7.7	120	12	31	10	22	.9
FEB												
22...	1045	175	335	7.0	.0	7.9	120	11	31	9.7	21	.8
MAR												
27...	1500	470	505	7.2	.0	10.0	190	80	45	20	32	1.0
APR												
20...	1500	2310	365	7.5	7.0	9.9	140	56	33	13	16	.6
MAY												
17...	1030	4540	165	6.8	6.0	9.0	68	19	18	5.5	6.1	.3
JUN												
04...	0930	6160	100	7.6	7.5	9.2	36	13	10	2.6	2.8	.2
JUL												
24...	1030	901	160	7.6	16.0	7.6	60	10	16	4.8	6.9	.4
AUG												
22...	0940	471	240	8.2	14.5	7.5	95	18	24	8.4	10	.4
SEP												
25...	0945	67	400	8.4	12.0	7.8	140	17	35	12	30	1.1

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)
OCT												
24...	2.3	130	0	110	42	7.9	.2	9.4	188	.26	147	.01
NOV												
08...	2.3	140	0	110	48	9.7	.2	9.3	206	.28	100	.00
DEC												
11...	2.6	130	0	110	43	10	.2	13	195	.27	99.5	.15
JAN												
24...	2.1	130	0	110	--	11	.2	14	194	.26	92.2	.26
FEB												
22...	2.0	130	0	110	41	9.9	.2	14	193	.26	91.2	.27
MAR												
27...	2.5	140	0	110	120	9.6	.2	9.5	308	.42	391	.68
APR												
20...	2.9	97	0	80	85	3.6	.2	11	213	.29	1330	1.3
MAY												
17...	1.4	59	0	48	22	1.7	.1	9.7	94	.13	1150	.12
JUN												
04...	1.0	37	0	30	8.0	1.0	.1	7.1	47	.06	782	.04
JUL												
24...	1.5	61	0	50	19	2.6	.2	6.8	88	.12	214	.00
AUG												
22...	1.6	93	0	76	34	3.5	.1	8.8	136	.19	173	.02
SEP												
25...	3.0	--	--	120	77	12	.3	3.7	245	.33	44.3	.01

09244410 YAMPA RIVER BELOW DIVERSION, NEAR HAYDEN, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	BORON, DIS-SOLVED (UG/L AS B)	IRON, DIS-SOLVED (UG/L AS FE)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	PERI-PHYTON BIOMASS ASH WEIGHT G/SQ M	PERI-PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M
OCT 24...	.01	1.3	1.3	1.3	.05	60	60	4.9	4.6	.290	.650
NOV 08...	.01	.38	.39	.39	.04	80	90	3.5	3.6	--	--
DEC 11...	.12	.26	.38	.53	.04	60	40	9.6	3.8	--	--
JAN 24...	.23	.18	.41	.67	.09	50	180	3.3	3.1	--	--
FEB 22...	.26	.11	.37	.64	.10	40	120	3.5	3.6	--	--
MAR 27...	.16	.33	.49	1.2	.07	70	90	6.1	2.6	--	--
APR 20...	.07	.86	.93	2.2	.19	40	20	12	8.2	--	--
MAY 17...	.02	.34	.36	.48	.15	40	140	--	--	--	--
JUN 04...	.01	.29	.30	.34	.05	30	130	6.3	6.3	.160	.240
JUL 24...	.00	.27	.27	.27	.05	40	110	6.3	7.6	14.1	14.1
AUG 22...	.00	.38	.38	.40	.06	40	110	6.8	6.5	.080	.240
SEP 25...	.00	.49	.49	.50	.06	70	70	--	7.2	46.0	48.3

DATE	TIME	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)
JUN 04...	0930	1300	70	1	0	0	0	0	0
SEP 25...	0945	100	0	1	1	0	<1	0	<1

DATE	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)
JUN 04...	0	0	7	1	21	0	50	20	2.1
SEP 25...	0	10	3	7	6	0	40	20	.0

DATE	MERCURY DIS-SOLVED (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
JUN 04...	1.2	6	0	0	0	1.6	10	0
SEP 25...	.0	18	12	0	0	1.0	90	50

09244410 YAMPA RIVER BELOW DIVERSION, NEAR HAYDEN, CO--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 24...	1000	300	7	5.7	--
NOV 08...	1035	175	5	2.4	--
DEC 11...	1635	175	18	8.5	--
JAN 24...	1515	175	42	20	--
FEB 22...	1045	175	9	4.3	--
MAR 27...	1500	470	88	112	--
APR 20...	1530	2290	309	1910	42
MAY 17...	1200	4520	111	1360	--
JUN 04...	1145	6160	68	1130	--
JUL 24...	1100	834	34	77	--
AUG 22...	1015	474	24	31	--
SEP 25...	1010	65	2	.35	--

09244470 STOKES GULCH NEAR HAYDEN, CO

LOCATION.--Lat 40°28'06", long 107°14'47", in NW¼NE¼ sec.22, T.6 N., R.88 W., Routt County, Hydrologic Unit 14050001, on right bank at Routt County Highway 53 crossing and 2 mi (3.2 km) south of Hayden.

DRAINAGE AREA.--13.6 mi² (35.2 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1976 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,375 ft (1,943 m), from topographic map.

REMARKS.--Records good except those for period of no gage-height record, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 189 ft³/s (5.35 m³/s), Apr. 6, 1978, gage height, 5.27 ft (1.606 m); no flow most of each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, about 170 ft³/s (4.81 m³/s) Apr. 18, 1979, gage height, unknown; no flow for most of year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	1.8	.33	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	3.5	.24	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	6.6	.20	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	2.2	.14	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.82	1.7	.09	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	1.7	1.4	.06	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	2.9	1.8	.05	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	20	7.5	.04	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	73	13	.04	.00	.00	.00
10	.00	.00	.00	.00	.00	.00	35	7.3	.03	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	15	3.8	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	17	4.4	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	19	2.7	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	50	1.8	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	76	1.4	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	100	1.2	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	110	1.0	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	120	.87	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	150	.78	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	23	.66	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	17	.63	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	14	.54	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	.00	10	.48	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	6.9	.45	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	6.4	.75	.00	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	3.2	.42	.00	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	2.3	.36	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	2.3	.45	.00	.00	.00	.00
29	.00	.00	.00	.00	---	.00	2.2	.54	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	1.7	.51	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.42	---	.00	.00	---
TOTAL	.00	.00	.00	.00	.00	.00	879.42	70.96	1.22	.00	.00	.00
MEAN	.000	.000	.000	.000	.000	.000	29.3	2.29	.041	.000	.000	.000
MAX	.00	.00	.00	.00	.00	.00	150	13	.33	.00	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.36	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	.00	.00	1740	141	2.4	.00	.00	.00

CAL YR 1978 TOTAL 686.87 MEAN 1.88 MAX 86 MIN .00 AC-FT 1360
WTR YR 1979 TOTAL 951.60 MEAN 2.61 MAX 150 MIN .00 AC-FT 1890

NOTE.--NO GAGE-HEIGHT RECORD APR. 14-20, MAY 3.

09244470 STOKES GULCH NEAR HAYDEN, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1976 to current year.

INSTRUMENTATION.--Water-quality monitor since October 1976. Pumping-sediment sampler since October 1976.

REMARKS.--Flow occurred only on days shown.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 10,100 micromhos May 24, 1978; minimum, 514 micromhos Apr. 7, 1978.
WATER TEMPERATURES: Maximum, 26.0°C May 15, 1978; minimum, 0.5°C Apr. 14-16, 1979.
SEDIMENT CONCENTRATIONS: Maximum daily, 902 mg/L Apr. 7, 1978; no flow many days during each year.
SEDIMENT LOADS: Maximum daily, 249 tons (226 t) Apr. 7, 1978; no flow many days during each year.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 8,500 micromhos June 6; minimum not determined.
WATER TEMPERATURES: Maximum, 21.5°C May 17; minimum, 0.5°C Apr. 14-16.
SEDIMENT CONCENTRATIONS: Maximum daily, 478 mg/L Apr. 21; no flow many days during year.
SEDIMENT LOADS: Maximum daily, 130 tons (120 t), estimated Apr. 19; no flow many days during year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)
APR												
09...	1430	E73	3250	8.0	3.5	1100	930	130	190	420	5.5	7.6
MAY												
07...	1530	1.9	5180	8.5	7.0	2000	1600	180	370	700	6.9	5.3

DATE	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)
APR											
09...	210	0	170	1600	57	.2	7.3	2580	3.51	15	.19
MAY											
07...	340	52	370	2900	96	.3	.1	4540	6.17	16	.00

DATE	TIME	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ALUM-INUM, RECOV, FM BOT-TOM MA-TERIAL (UG/G)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CADMIUM RECOV, FM BOT-TOM MA-TERIAL (UG/G AS CD)
APR											
09...	1430	3900	10	--	3	2	--	170	4	1	--
MAY											
07...	1530	150	30	--	--	--	--	300	--	--	--
AUG											
02...	1400	--	--	3800	--	--	10	--	--	--	0

DATE	CHRO-MIUM, RECOV, FM BOT-TOM MA-TERIAL (UG/G)	COBALT, RECOV, FM BOT-TOM MA-TERIAL (UG/G AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	COPPER, RECOV, FM BOT-TOM MA-TERIAL (UG/G AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	IRON, RECOV, FM BOT-TOM MA-TERIAL (UG/G AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	LEAD, RECOV, FM BOT-TOM MA-TERIAL (UG/G AS PB)
APR											
09...	--	--	13	3	--	6100	10	--	28	7	--
MAY											
07...	--	--	--	--	--	80	50	--	9	0	--
AUG											
02...	7	7	--	--	20	--	--	11000	--	--	15

E ESTIMATED.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY DISSOLVED (UG/L AS HG)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG)	MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, DISSOLVED (UG/L AS NI)
APR 09...	120	30	--	.1	.0	--	5	3	12	2
MAY 07...	40	40	--	--	--	--	--	--	--	--
AUG 02...	--	--	210	--	--	.02	--	--	--	--

DATE	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	CARBON, ORGANIC TOT. IN BOTTOM MAT. (G/KG AS C)	CARBON, INORGANIC, TOT IN BOT MAT (G/KG AS C)
APR 09...	95	77	--	50	20	--	28	20	--	--
MAY 07...	--	--	--	40	30	--	27	25	--	--
AUG 02...	--	--	3	--	--	60	--	--	9.3	8.7

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							---	5300	---			
2							---	5400	---			
3							---	---	---			
4							---	4950	7400			
5							---	5100	7720			
6							---	---	8240			
7							---	5630	7960			
8							---	---	8110			
9							2760	---	7520			
10							2380	---	---			
11							---	---	---			
12							---	---	---			
13							3500	---	---			
14							4210	---	---			
15							---	---	---			
16							---	---	---			
17							---	---	---			
18							---	---	---			
19							---	---	---			
20							1380	---	---			
21							1740	5960	---			
22							1960	6110	---			
23							1850	6220	---			
24							2040	6350	---			
25							2700	6500	---			
26							3180	6680	---			
27							3500	6740	---			
28							3930	6820	---			
29							---	---	---			
30							4550	---	---			
31							---	---	---			

09244470 STOKES GULCH NEAR HAYDEN, CO--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	15.0	10.0								
2	---	---	14.0	9.0								
3	---	---	9.5	6.5								
4	---	---	15.5	5.0								
5	7.5	5.5	16.0	9.5								
6	10.0	4.0	14.0	7.5								
7	10.0	3.5	7.5	5.5								
8	9.0	2.5	9.5	3.5								
9	3.5	2.5	11.0	5.5								
10	3.5	2.5	10.5	6.5								
11	3.5	2.0	8.5	5.5								
12	5.0	1.0	12.0	4.0								
13	3.5	.5	16.0	6.5								
14	9.5	.5	19.5	9.5								
15	7.5	.5	19.5	11.0								
16	8.0	.5	18.5	12.0								
17	9.0	1.0	21.5	11.0								
18	11.5	1.5	21.0	12.5								
19	11.0	3.5	---	---								
20	12.0	5.0	---	---								
21	14.0	8.0	---	---								
22	14.5	8.0	---	---								
23	15.5	8.5	---	---								
24	13.5	10.0	---	---								
25	12.5	7.5	---	---								
26	15.5	6.5	---	---								
27	16.5	8.0	---	---								
28	15.5	10.5	---	---								
29	17.5	8.0	---	---								
30	17.0	10.0	---	---								
31	---	---	---	---								

09244470 STOKES GULCH NEAR HAYDEN, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	.00	---	---	1.8	28	.13	.33	---	.05
2	.00	---	---	3.5	20	.19	.24	52	.04
3	.00	---	---	6.6	---	2.5	.20	52	.03
4	.00	---	---	2.2	20	.12	.14	---	.02
5	.82	---	.50	1.7	12	.06	.09	64	.02
6	1.7	---	.50	1.4	---	.05	.06	---	.01
7	2.9	---	1.0	1.8	22	.11	.05	---	.01
8	20	---	5.5	7.5	63	1.3	.04	---	.01
9	73	405	66	13	49	1.7	.04	---	.01
10	35	132	34	7.3	36	.75	.03	---	.00
11	15	---	6.5	3.8	41	.43	.00	---	---
12	17	---	6.0	4.4	39	.51	.00	---	---
13	19	121	6.7	2.7	38	.30	.00	---	---
14	50	99	13	1.8	33	.16	.00	---	---
15	76	---	75	1.4	---	.13	.00	---	---
16	100	---	100	1.2	38	.12	.00	---	---
17	110	---	100	1.0	---	.11	.00	---	---
18	120	---	110	.87	---	.09	.00	---	---
19	150	---	130	.78	---	.07	.00	---	---
20	23	---	35	.66	---	.06	.00	---	---
21	17	478	22	.63	---	.05	.00	---	---
22	14	302	13	.54	---	.04	.00	---	---
23	10	262	9.7	.48	42	.05	.00	---	---
24	6.9	252	6.7	.45	---	.08	.00	---	---
25	6.4	136	3.0	.75	---	.09	.00	---	---
26	3.2	98	1.4	.42	---	.08	.00	---	---
27	2.3	79	.49	.36	---	.07	.00	---	---
28	2.3	41	.27	.45	71	.09	.00	---	---
29	2.2	---	.25	.54	---	.10	.00	---	---
30	1.7	51	.25	.51	---	.08	.00	---	---
31	---	---	---	.42	57	.07	---	---	---
TOTAL	879.42	---	746.76	70.96	---	9.69	1.22	---	0.20

09244470 STOKES GULCH NEAR HAYDEN, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JULY			AUGUST			SEPTEMBER	
1	.00			.00			.00		
2	.00			.00			.00		
3	.00			.00			.00		
4	.00			.00			.00		
5	.00			.00			.00		
6	.00			.00			.00		
7	.00			.00			.00		
8	.00			.00			.00		
9	.00			.00			.00		
10	.00			.00			.00		
11	.00			.00			.00		
12	.00			.00			.00		
13	.00			.00			.00		
14	.00			.00			.00		
15	.00			.00			.00		
16	.00			.00			.00		
17	.00			.00			.00		
18	.00			.00			.00		
19	.00			.00			.00		
20	.00			.00			.00		
21	.00			.00			.00		
22	.00			.00			.00		
23	.00			.00			.00		
24	.00			.00			.00		
25	.00			.00			.00		
26	.00			.00			.00		
27	.00			.00			.00		
28	.00			.00			.00		
29	.00			.00			.00		
30	.00			.00			.00		
31	.00			.00			---		
TOTAL	0.00			0.00			0.00		
YEAR	951.60		756.65						

09245000 ELKHEAD CREEK NEAR ELKHEAD, CO

LOCATION.--Lat 40°40'11", long 107°17'04", in NW¼NE¼ sec.8, T.8 N., R.88 W., Routt County, Hydrologic Unit 14050001, on right bank 0.2 mi (0.3 km) upstream from North Fork Elkhead Creek, 4.5 mi (7.2 km) northwest of Elkhead, and 12 mi (19 km) north of Hayden.

DRAINAGE AREA.--64.2 mi^2 (166.3 km^2).

PERIOD OF RECORD.--January to November 1910 and May to November 1920 (monthly discharge only, published in WSP 1313; published as "at Hayes Ranch"), April 1953 to current year.

REVISED RECORDS.--WSP 1733: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 6,845 ft (2,086 m), from topographic map. Prior to Nov. 30, 1920, nonrecording gage or water-stage recorder 675 ft (210 m) upstream at different datum.

REMARKS.--Records good except those for winter period, which are poor. No diversion above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--26 years (water years 1954-79), 53.7 ft^3/s (1.521 m^3/s), 38,910 acre-ft/yr (48.0 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,870 ft^3/s (53.0 m^3/s) May 17, 1978, gage height 7.07 ft (2.155 m); maximum daily discharge, 1,660 ft^3/s (47.0 m^3/s) May 22, 1920; no flow Sept. 1, 1954, Sept. 12-19, 24, 1955, Aug. 27, 29, 1961, Aug. 14-19, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,770 ft^3/s (50.1 m^3/s) at 0100 May 25, gage height, 7.05 ft (2.149 m), only peak above base of 800 ft^3/s (23 m^3/s); minimum daily, 1.3 ft^3/s (0.037 m^3/s), Sept. 19-21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.6	3.7	5.0	2.9	2.6	3.5	4.6	314	452	43	6.6	3.3
2	2.6	3.9	5.0	2.9	2.6	3.6	4.7	318	430	43	6.4	3.2
3	2.6	3.8	5.0	2.8	2.6	3.9	4.3	316	434	42	6.0	3.1
4	2.5	3.8	5.0	2.8	2.5	3.9	5.8	244	443	38	5.7	2.9
5	2.5	3.8	5.0	2.7	2.6	4.0	3.1	336	448	34	5.5	2.8
6	2.5	3.8	5.0	2.6	2.6	4.2	3.4	477	439	31	5.2	2.6
7	2.5	3.7	5.0	2.4	2.7	4.4	4.3	382	409	29	5.0	2.5
8	2.6	3.8	5.0	2.3	2.8	4.4	5.0	287	372	27	4.7	2.4
9	2.7	3.8	5.0	2.2	2.9	4.4	6.2	232	325	24	4.4	2.2
10	2.8	4.0	5.0	2.3	2.7	4.5	5.4	202	261	21	4.3	2.1
11	2.8	4.1	5.2	2.2	2.6	4.3	5.2	170	232	19	4.3	2.0
12	2.8	4.4	5.2	2.2	2.6	4.4	4.9	149	219	17	4.1	1.9
13	2.8	5.1	5.2	2.2	2.6	4.4	4.4	176	216	15	3.9	1.8
14	2.8	5.9	5.2	2.4	2.7	4.4	4.3	361	215	14	3.8	1.7
15	2.9	6.1	5.2	2.1	2.7	4.4	5.3	604	214	13	3.8	1.7
16	2.9	5.9	5.2	2.1	2.8	4.4	7.3	790	195	12	4.3	1.6
17	3.0	5.5	5.2	2.3	2.8	4.4	9.2	870	170	11	4.3	1.5
18	3.0	5.3	5.2	2.1	2.8	4.5	13	988	144	10	4.6	1.4
19	3.1	5.2	5.2	2.0	2.8	4.5	29	1060	131	9.9	5.1	1.3
20	3.2	5.4	5.2	1.9	2.8	4.5	54	1060	133	9.2	6.2	1.3
21	3.3	5.4	5.2	1.9	2.9	4.4	73	1110	110	8.7	8.4	1.3
22	3.8	5.6	5.2	2.1	2.9	4.2	83	1060	93	8.6	8.2	1.5
23	5.2	5.3	5.0	2.1	3.1	4.2	87	1030	84	8.3	6.7	1.5
24	4.5	4.9	5.0	2.2	3.1	4.2	135	1030	77	9.1	5.6	1.5
25	4.2	5.1	4.2	2.3	3.1	4.1	163	1210	72	11	5.1	1.5
26	4.0	5.1	3.7	2.5	3.2	4.0	163	915	60	10	4.6	1.5
27	3.8	5.0	3.7	2.7	3.3	4.0	171	875	57	9.2	4.2	1.5
28	3.7	5.0	3.5	2.8	3.4	6.9	222	856	54	8.6	3.9	1.5
29	3.7	5.0	3.4	2.9	---	6.3	251	780	51	8.1	3.7	1.6
30	3.7	5.0	3.2	2.8	---	6.3	292	609	43	7.6	3.6	1.7
31	3.7	---	3.1	2.7	---	4.4	---	520	---	7.1	3.4	---
TOTAL	98.8	142.4	147.2	74.4	78.8	138.0	1823.4	19331	6583	558.4	155.8	58.4
MEAN	3.19	4.75	4.75	2.40	2.81	4.45	60.8	624	219	18.0	5.03	1.95
MAX	5.2	6.1	5.2	2.9	3.4	6.9	292	1210	452	43	8.4	3.3
MIN	2.5	3.7	3.1	1.9	2.5	3.5	3.1	149	43	7.1	3.4	1.3
AC-FT	196	282	292	148	156	274	3620	38340	13060	1110	309	116

CAL YR 1978 TOTAL 30536.0 MEAN 83.7 MAX 1290 MIN 2.1 AC-FT 60570
WTR YR 1979 TOTAL 29189.6 MEAN 80.0 MAX 1210 MIN 1.3 AC-FT 57900

09246550 YAMPA RIVER BELOW ELKHEAD CREEK, NEAR CRAIG, CO

LOCATION.--Lat 40°29'50", long 107°30'34", in NW¼NE¼ sec.8,T.6 N., R.90 W., Moffat County, Hydrologic Unit 14050001, 350 ft (107 m) northeast of Craig airport runway, 2.3 mi (3.6 km) east of old State Highways 789 and 394 junction south of Craig, and about 1.5 mi (2.4 km) upstream from mouth of Fortification Creek.

PERIOD OF RECORD.--June 1975 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO
OCT 24...	1220	240	325	7.8	7.0	9.1	120	14	32	10	20	.8
NOV 08...	1255	175	335	8.1	4.0	10.2	130	19	34	12	22	.8
DEC 12...	1045	175	370	7.6	.0	9.7	150	23	37	13	24	.9
JAN 25...	1200	178	340	7.1	.5	7.2	130	34	35	11	21	.8
FEB 22...	0925	E185	360	7.2	.0	7.8	130	24	34	11	24	.9
MAR 27...	1600	E530	470	7.3	.0	10.6	180	67	43	18	33	1.1
APR 23...	1400	E4800	320	7.9	8.0	9.6	120	41	29	12	16	.6
MAY 17...	1355	7460	192	6.9	11.0	8.6	78	25	20	6.9	7.6	.4
JUN 04...	1330	E6100	125	7.7	11.0	9.9	43	15	12	3.2	3.7	.2
JUL 24...	1400	E900	190	7.7	21.0	7.7	70	13	18	6.1	9.8	.5
AUG 22...	1110	E480	240	8.4	17.0	8.4	92	20	23	8.3	12	.5
SEP 25...	1145	E70	430	8.2	15.5	7.7	150	23	38	14	30	1.1

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)
OCT 24...	2.3	130	0	110	41	9.3	.2	6.7	186	.25	121	.01
NOV 08...	2.1	140	0	110	45	9.8	.2	7.3	202	.27	95.4	.00
DEC 12...	2.7	150	0	120	51	11	.2	12	225	.31	106	.19
JAN 25...	2.1	120	0	98	47	9.7	.2	14	199	.27	95.6	.33
FEB 22...	2.1	130	0	110	54	12	.2	13	215	.29	107	.40
MAR 27...	2.6	140	0	110	110	17	.2	9.2	302	.41	432	.57
APR 23...	2.6	99	0	81	68	4.0	.1	10	191	.26	2480	.98
MAY 17...	1.6	65	0	53	32	2.4	.1	10	113	.15	2280	.17
JUN 04...	1.2	34	0	28	24	1.6	.2	7.8	71	.10	1170	.05
JUL 24...	1.5	69	0	57	27	3.1	.2	6.7	107	.15	260	.00
AUG 22...	1.7	87	0	71	39	4.0	.1	8.6	140	.19	181	.04
SEP 25...	2.9	--	--	130	70	11	.3	2.1	247	E.34	E46.7	.01

E ESTIMATED.

09246550 YAMPA RIVER BELOW ELKHEAD CREEK, NEAR CRAIG, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	BORON, DIS-SOLVED (UG/L AS B)	IRON, DIS-SOLVED (UG/L AS FE)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	PERI-PHYTON BIOMASS ASH WEIGHT G/SQ M	PERI-PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M
OCT 24...	.01	.50	.51	.52	.03	60	60	3.7	3.6	--	--
NOV 08...	.01	.44	.45	.45	.02	70	70	--	3.4	--	--
DEC 12...	.05	.23	.28	.47	.02	80	40	--	3.9	--	--
JAN 25...	.23	.16	.39	.72	.07	60	170	4.2	3.2	--	--
FEB 22...	.26	.12	.38	.78	.08	50	90	--	4.7	--	--
MAR 27...	.13	.09	.22	.79	.07	70	90	6.3	4.0	--	--
APR 23...	.06	.87	.93	1.9	.21	30	20	13	8.7	--	--
MAY 17...	.02	.47	.49	.66	.21	40	510	--	--	--	--
JUN 04...	.02	.41	.43	.48	.05	20	70	--	7.3	--	--
JUL 24...	.01	.19	.20	.20	.05	30	100	4.4	4.1	--	--
AUG 22...	.00	.40	.40	.44	.06	40	100	17	--	9.76	9.76
SEP 25...	.04	.31	.35	.36	.02	70	60	5.4	5.8	5.91	6.54

DATE	TIME	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)
JUN 04...	1330	1300	40	1	0	0	0	0	0
SEP 25...	1145	130	0	1	1	0	<1	--	<1

DATE	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)
JUN 04...	0	0	8	1	9	0	70	10	2.9
SEP 25...	0	0	8	5	5	0	40	20	.0

DATE	MERCURY DIS-SOLVED (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
JUN 04...	.8	4	0	0	0	1.8	30	0
SEP 25...	.0	30	10	0	0	1.0	80	40

09247600 YAMPA RIVER BELOW CRAIG, CO

LOCATION.--Lat 40°29'04", long 107°36'23", in SW¼SE¼ sec.9, T.6 N., R.91 W., Moffat County, Hydrologic Unit 14050001, at State Highways 13 and 789 bridge about 0.5 mi (0.8 km) above the mouth of Johnson Gulch, and about 3 mi (4.8 km) southwest of Craig.

PERIOD OF RECORD.--June 1975 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM ADSORPTION RATIO
OCT 24...	1330	250	345	8.6	8.0	12.8	130	14	33	11	21	.8
NOV 08...	1455	174	370	9.0	6.0	16.0	140	34	36	12	26	1.0
DEC 12...	1300	179	410	7.5	.0	9.4	150	17	38	13	32	1.1
JAN 25...	1330	E180	380	7.1	.0	7.0	130	24	34	11	26	1.0
FEB 22...	0850	190	420	7.0	.0	7.9	140	24	36	12	31	1.1
MAR 26...	1345	465	500	7.3	1.5	10.6	180	53	41	18	37	1.2
APR 23...	1130	5040	350	7.6	7.5	9.2	120	44	29	12	18	.7
MAY 17...	1440	7560	200	7.0	11.0	8.3	77	22	20	6.6	9.2	.5
JUN 04...	1440	E6180	95	7.8	12.0	9.2	44	14	12	3.4	4.0	.3
JUL 24...	1615	718	200	8.5	23.0	9.2	70	11	18	6.2	11	.6
AUG 22...	1250	688	280	8.7	17.5	9.3	100	22	26	9.6	15	.6
SEP 25...	1400	63	460	8.6	19.5	9.8	160	19	39	15	40	1.4

DATE	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)
OCT 24...	2.3	130	4	110	48	12	.2	5.6	201	.27	136	.01
NOV 08...	2.3	110	9	110	51	23	.2	5.8	220	.30	103	.01
DEC 12...	2.8	160	0	130	60	11	.2	11	247	.34	119	.20
JAN 25...	2.2	130	0	110	53	11	.2	13	215	.29	104	.38
FEB 22...	2.2	140	0	110	63	12	.2	13	239	.33	123	.40
MAR 26...	2.6	150	0	120	100	13	.2	9.4	295	.40	370	.50
APR 23...	3.2	95	0	78	77	4.2	.2	10	200	.27	2720	.98
MAY 17...	1.6	67	0	55	31	2.2	.1	10	114	.16	2330	.15
JUN 04...	1.1	37	0	30	15	1.3	.2	7.6	63	.09	1050	.06
JUL 24...	1.9	72	0	59	29	5.3	.2	6.1	113	.15	219	.00
AUG 22...	1.9	100	0	82	49	5.4	.1	8.4	165	.22	307	.02
SEP 25...	3.1	--	--	140	78	13	.3	.8	274	.37	47.0	.33

E ESTIMATED.

09247600 YAMPA RIVER BELOW CRAIG, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	BORON, DISSOLVED (UG/L AS B)	IRON, DISSOLVED (UG/L AS FE)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	PERIPHYTON BIOMASS ASH WEIGHT G/SQ M	PERIPHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M
OCT 24...	.01	.93	.94	.95	.06	70	30	4.1	4.2	1.56	2.36
NOV 08...	.01	.41	.42	.43	.07	80	60	--	2.6	--	--
DEC 12...	.20	.29	.49	.69	.11	70	30	5.1	4.4	--	--
JAN 25...	.17	.35	.52	.90	.17	70	230	--	7.3	--	--
FEB 22...	.32	.18	.50	.90	.13	50	70	4.3	4.2	--	--
MAR 26...	.23	.25	.48	.98	.10	80	60	5.4	4.6	--	--
APR 23...	.07	.82	.89	1.9	.20	30	20	14	8.2	--	--
MAY 17...	.02	.62	.64	.79	.25	50	140	13	--	--	--
JUN 04...	.04	.41	.45	.51	.07	20	100	6.7	6.6	.000	.080
JUL 24...	.01	.28	.29	.29	.07	20	100	--	8.0	--	--
AUG 22...	.00	.52	.52	.54	.08	50	80	7.4	--	--	--
SEP 25...	.16	.46	.62	.95	.17	80	50	8.4	7.6	--	--

DATE	TIME	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BERYLLIUM, DISSOLVED (UG/L AS BE)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)
JUN 04...	1440	1800	70	1	0	0	0	0	0
SEP 25...	1400	150	50	1	1	0	<1	0	<1

DATE	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)
JUN 04...	0	0	7	1	5	0	80	10	2.0
SEP 25...	10	10	5	13	11	0	50	20	.0

DATE	MERCURY DISSOLVED (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	VANADIUM, DISSOLVED (UG/L AS V)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)
JUN 04...	1.6	5	0	0	0	1.6	20	0
SEP 25...	.0	16	16	0	0	1.0	40	20

09247600 YAMPA RIVER BELOW CRAIG, CO--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
OCT 24...	1315	250	3	2.0
NOV 08...	1420	174	5	2.3
DEC 12...	1300	179	9	4.3
JAN 25...	1330	E180	51	25
FEB 22...	0850	190	10	5.1
MAR 26...	1345	465	55	69
APR 23...	1200	5040	297	4040
MAY 17...	1645	7560	418	8530
JUN 04...	1500	6180	128	2140
JUL 24...	1615	718	23	45
AUG 22...	1335	688	21	39
SEP 25...	1410	53	4	.57

DATE	TIME	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM
APR 23...	1200	40	49	64	84	92	97	100
MAY 17...	1645	--	--	--	64	--	--	--

E ESTIMATED.

09249200 SOUTH FORK OF WILLIAMS FORK NEAR PAGODA, CO

LOCATION.--Lat 40°12'44", long 107°26'32", in NE¼SE¼ sec.24, T.3 N., R.90 W., Rio Blanco County, Hydrologic Unit 14050001, on left bank at downstream side of private bridge, 1.3 mi (2.1 km) upstream from Pine Creek, and 11 mi (18 km) south of Pagoda.

DRAINAGE AREA.--46.7 mi² (121.0 km²).

PERIOD OF RECORD.--October 1965 to September 1979 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 7,235 ft (2,205 m), from topographic map.

REMARKS.--Records fair except those for period of no gage-height record, which are poor. Diversions above station for irrigation of about 100 acres (405,000 m²) above and 50 acres (202,000 m²) below station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--14 years, 42.3 ft³/s (1.198 m³/s), 30,650 acre-ft/yr (37.8 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 910 ft³/s (25.8 m³/s) May 9, 1974, gage height, 3.97 ft (1.210 m), from rating curve extended above 420 ft³/s (12 m³/s); no flow July 31, Aug. 31, Sept. 1, 7, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 400 ft³/s (11 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
May 18	2030	*584	16.5	3.33	1.015	May 28	2130	548	15.5	3.25	0.994

Minimum daily discharge, 2.0 ft³/s (0.057 m³/s) Oct. 8, 9, 14, Nov. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.1	3.1	2.4	3.8	5.6	5.8	5.2	99	208	87	6.0	2.6
2	2.1	3.3	2.4	3.9	5.6	5.8	5.2	100	258	75	5.4	2.6
3	2.1	3.3	2.4	4.0	5.4	5.8	5.2	85	276	67	5.0	2.6
4	2.1	2.6	2.4	4.0	5.4	5.8	5.2	74	290	61	4.2	2.5
5	2.1	2.9	2.5	4.0	5.2	5.8	5.5	104	318	47	3.5	2.5
6	2.2	2.0	2.5	4.0	5.2	5.8	7.8	124	343	40	3.7	2.5
7	2.1	2.1	2.6	4.0	5.4	5.6	10	106	324	37	3.9	2.5
8	2.0	2.9	2.6	4.0	5.6	5.8	11	84	260	31	8.3	2.5
9	2.0	2.6	2.6	4.0	5.6	5.6	14	67	202	25	13	2.5
10	2.4	3.0	2.6	4.0	5.8	5.4	13	53	184	23	8.8	2.5
11	2.5	2.7	2.7	4.2	6.0	5.4	11	53	217	18	6.0	2.5
12	2.4	4.4	2.7	4.4	6.0	5.4	10	56	282	18	4.2	2.6
13	2.3	5.1	2.8	4.6	6.0	5.2	9.3	80	294	15	5.8	2.6
14	2.0	5.6	2.9	4.8	6.0	5.0	11	127	334	14	5.2	2.6
15	2.2	4.6	3.0	5.0	6.0	5.0	19	160	314	14	5.2	2.6
16	2.4	4.2	3.0	5.0	5.8	5.0	28	214	282	12	7.3	2.6
17	2.6	5.1	3.0	5.0	5.8	5.0	49	260	249	12	7.3	2.6
18	2.7	4.7	3.0	5.0	5.8	5.0	66	354	214	11	12	2.6
19	2.7	5.2	3.0	5.0	5.8	5.2	67	374	168	12	10	2.6
20	2.6	3.6	3.0	5.0	5.8	5.2	57	355	138	13	14	2.6
21	3.7	3.0	3.1	5.2	5.8	5.0	54	375	160	9.9	18	2.6
22	5.9	2.5	3.2	5.2	5.8	5.2	65	384	178	9.9	8.3	2.6
23	3.9	2.9	3.3	5.4	5.8	5.0	93	384	175	9.6	5.2	2.6
24	4.1	2.8	3.4	5.6	5.8	5.2	105	420	168	9.6	4.4	2.6
25	4.8	2.2	3.5	5.8	5.8	5.0	87	426	155	8.3	4.2	2.6
26	2.5	2.7	3.5	5.8	5.8	5.2	74	433	145	5.8	3.9	2.6
27	3.2	2.6	3.5	5.8	5.8	5.0	84	422	142	6.6	3.3	4.1
28	3.1	2.3	3.5	5.8	5.8	5.0	90	440	120	6.6	3.2	3.3
29	2.9	2.3	3.6	5.6	---	5.0	86	405	105	5.2	2.8	3.0
30	3.1	2.4	3.7	5.6	---	5.0	101	312	95	5.2	2.8	2.8
31	3.2	---	3.7	5.6	---	5.0	---	270	---	6.2	3.2	---
TOTAL	86.0	98.7	92.1	149.1	160.2	164.4	1248.4	7200	6598	714.9	198.1	80.0
MEAN	2.77	3.29	2.97	4.81	5.72	5.30	41.6	232	220	23.1	6.39	2.67
MAX	5.9	5.6	3.7	5.8	6.0	5.8	105	440	343	87	18	4.1
MIN	2.0	2.0	2.4	3.8	5.2	5.0	5.2	53	95	5.2	2.8	2.5
AC-FT	171	196	183	296	318	326	2480	14280	13090	1420	393	159

CAL YR 1978 TOTAL 20403.34 MEAN 55.9 MAX 590 MIN .94 AC-FT 40470
WTR YR 1979 TOTAL 16789.90 MEAN 46.0 MAX 440 MIN 2.0 AC-FT 33300

NOTE.--NO GAGE-HEIGHT RECORD DEC. 1 TO APR. 4.

09249750 WILLIAMS FORK RIVER AT MOUTH, NEAR HAMILTON, CO

LOCATION.--Lat 40°26'14", long 107°38'50", in SE¼NW¼ sec.31, T.6 N., R.91 W., Moffat County, Hydrologic Unit 14050001, at Coal Mine Road crossing about 1,500 ft (457 m) upstream from confluence with Yampa River, and about 8 mi (12.9 km) south-southwest of Craig.

PERIOD OF RECORD.--June 1975 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO
OCT 25...	0940	54	435	8.0	5.5	9.5	200	36	42	23	17	.5
NOV 14...	1155	39	450	8.0	.0	11.0	210	64	47	23	21	.6
DEC 12...	1500	46	460	7.8	.0	10.4	210	41	46	22	16	.5
JAN 25...	1445	38	525	7.4	.0	9.9	220	51	48	25	22	.6
FEB 23...	1300	44	500	7.4	.0	8.9	230	66	51	25	20	.6
MAR 26...	1600	72	510	7.7	4.0	10.6	240	76	55	25	22	.6
APR 20...	1830	237	490	7.8	10.0	8.7	200	53	44	22	18	.6
MAY 18...	0925	1350	225	7.1	8.0	8.9	120	25	28	11	6.6	.3
JUN 04...	1600	1160	200	7.9	11.0	8.7	89	19	23	7.6	4.5	.2
JUL 25...	1030	103	360	7.9	20.5	7.7	160	18	35	17	13	.5
AUG 22...	1410	84	380	8.3	21.0	8.3	170	24	39	18	14	.5
SEP 25...	1500	31	420	8.6	18.5	8.7	170	43	38	19	19	.6

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)
OCT 25...	1.8	200	0	160	69	3.3	.1	12	267	.36	38.9	.05
NOV 14...	1.5	180	0	150	95	3.6	.1	13	293	.40	30.9	.10
DEC 12...	1.8	200	0	160	68	1.8	.1	15	269	.37	33.6	.06
JAN 25...	1.5	210	0	170	92	3.7	.1	15	311	.42	32.3	.22
FEB 23...	1.5	200	0	160	89	3.4	.1	14	303	.41	36.4	.19
MAR 26...	1.9	200	0	160	110	4.3	.1	10	327	.44	63.6	.13
APR 20...	2.3	180	0	150	99	4.4	.2	11	290	.39	186	.54
MAY 18...	1.8	110	0	90	28	2.3	.2	11	145	.20	529	.28
JUN 04...	.7	85	0	70	21	1.2	.1	9.1	109	.15	341	.08
JUL 25...	1.6	170	0	140	45	4.5	.1	12	212	.29	59.0	.00
AUG 22...	1.7	180	0	150	56	2.4	.1	13	233	.32	52.8	.02
SEP 25...	1.6	--	--	130	58	15	.2	11	240	.33	20.1	.02

09249750 WILLIAMS FORK RIVER AT MOUTH, NEAR HAMILTON, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	BORON, DIS-SOLVED (UG/L AS B)	IRON, DIS-SOLVED (UG/L AS FE)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	PERI-PHYTON BIOMASS ASH WEIGHT G/SQ M	PERI-PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M
OCT 25...	.01	1.9	1.9	2.0	.01	50	40	4.6	5.1	.800	1.15
NOV 14...	.01	.30	.31	.41	.01	60	20	2.9	2.6	--	--
DEC 12...	.01	.12	.13	.19	.01	40	20	--	4.0	--	--
JAN 25...	.04	.40	.44	.66	.03	40	150	11	3.7	--	--
FEB 23...	.09	.07	.16	.35	.02	40	30	2.7	2.9	--	--
MAR 26...	.07	.12	.19	.32	.02	60	40	4.9	3.3	--	--
APR 20...	.04	1.3	1.3	1.8	.27	30	<0	13	6.3	.940	1.34
MAY 18...	.04	4.6	4.6	4.9	1.9	1700	70	72	--	--	--
JUN 04...	.01	.66	.67	.75	.13	30	20	8.7	8.3	.080	.080
JUL 25...	.01	.13	.14	.14	.05	0	20	3.8	3.9	--	--
AUG 22...	.00	1.7	1.7	1.7	.06	40	40	7.7	5.4	--	--
SEP 25...	.02	.36	.38	.40	.01	40	30	--	5.2	9.53	10.9

DATE	TIME	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)
JUN 04...	1600	2000	30	2	0	0	0	0	0
SEP 25...	1500	100	0	1	1	0	<1	0	<1

DATE	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)
JUN 04...	0	0	10	0	14	0	140	10	2.3
SEP 25...	0	10	13	6	24	0	10	8	.1

DATE	MERCURY DIS-SOLVED (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
JUN 04...	1.6	11	3	1	1	1.0	40	0
SEP 25...	.0	30	11	0	0	1.0	130	30

09249750 WILLIAMS FORK RIVER AT MOUTH, NEAR HAMILTON, CO--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGF, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 25...	0920	54	146	21	--
NOV 14...	1050	39	10	1.1	--
DEC 12...	1500	46	10	1.2	--
JAN 25...	1445	38	69	7.2	--
FEB 23...	1300	44	167	20	62
MAR 26...	1600	72	54	10	--
APR 20...	1830	237	291	186	86
MAY 18...	1130	1350	2710	9880	62
JUN 04...	1600	1160	648	2030	--
JUL 25...	1100	103	15	4.2	--
AUG 22...	1425	84	58	13	--
SEP 25...	1515	31	5	.42	--

09250000 MILK CREEK NEAR THORNBURGH, CO

LOCATION.--Lat 40°11'37", long 107°43'57", in NE¼ sec.32, T.3 N., R.92 W., Rio Blanco County, Hydrologic Unit 14050003, on right bank 2.2 mi (3.5 km) southwest of Thornburgh and 3.0 mi (4.8 km) upstream from Little Creek.

DRAINAGE AREA.--65 mi^2 (168 km^2), approximately.

PERIOD OF RECORD.--October 1952 to current year. Published as "near Thornburg" October 1952 to September 1958.

GAGE.--Water-stage recorder. Datum of gage is 6,599.32 ft (2,011.473 m), National Geodetic Vertical Datum of 1929 (levels by Water and Power Resources Service).

REMARKS.--Records good except those for period of ice effect, which are fair. Diversion for irrigation of about 1,321 acres (535 km^2) above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--27 years, 24.9 ft^3/s (0.705 m^3/s), 18,040 acre-ft/yr (22.2 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,050 ft^3/s (29.7 m^3/s) May 10, 1974, gage height, 5.03 ft (1.533 m), from rating curve extended above 340 ft^3/s (9.6 m^3/s); maximum gage height, 5.52 ft (1.682 m) June 1, 1957; minimum daily discharge, 0.20 ft^3/s (0.006 m^3/s) for several days in 1956, 1963, and 1966.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 637 ft^3/s (18.0 m^3/s) at 0630 May 25, gage height, 5.69 ft (1.734 m), only peak above base of 250 ft^3/s (7.1 m^3/s); minimum daily, 0.32 ft^3/s (0.009 m^3/s) Oct. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.45	.67	2.6	1.5	1.2	4.0	8.0	122	182	18	4.8	1.6
2	.45	.68	2.4	1.0	1.3	3.8	7.0	137	177	17	4.7	1.5
3	.40	.70	2.2	1.0	1.0	3.3	6.0	133	175	17	4.4	1.4
4	.35	.77	2.0	1.4	1.5	3.0	6.0	95	176	17	4.3	1.4
5	.30	.60	1.8	2.0	1.3	3.3	6.0	113	173	17	4.1	1.3
6	.32	.61	1.6	1.8	1.6	3.5	12	158	170	14	3.9	1.2
7	.39	.70	1.2	1.5	1.8	4.0	20	134	174	14	3.6	1.2
8	.38	.62	1.1	1.0	2.5	4.6	25	107	146	12	3.4	1.1
9	.41	.60	1.0	1.5	4.0	4.6	30	99	132	10	3.2	.90
10	.41	.60	1.4	2.0	6.0	5.0	25	94	109	8.5	3.1	.87
11	.46	.80	1.6	3.0	6.5	5.4	13	90	96	7.4	2.9	.83
12	.46	1.0	1.8	5.4	7.0	5.0	12	92	92	7.2	3.0	.73
13	.46	2.0	1.5	5.0	7.0	5.8	12	96	99	6.8	2.8	.71
14	.46	2.3	1.3	5.0	7.0	5.6	25	122	102	6.6	2.8	.63
15	.46	2.5	1.2	5.2	6.0	5.6	80	163	97	6.5	2.7	.60
16	.48	2.3	1.1	4.8	6.0	6.0	75	221	80	5.4	2.8	.62
17	.50	2.2	1.1	5.0	6.0	6.0	74	250	68	6.4	2.7	.69
18	.50	2.3	2.0	4.4	6.0	5.6	88	330	58	6.3	2.7	.69
19	.50	2.5	2.2	4.4	5.0	5.0	78	388	51	6.3	2.5	.71
20	.50	2.6	2.2	4.0	4.5	5.0	54	376	47	6.1	2.4	.72
21	.55	2.6	1.9	3.5	5.0	5.4	52	382	40	6.1	2.6	.71
22	.63	2.4	2.0	3.5	5.4	6.0	58	390	38	5.8	2.8	.69
23	.83	2.2	2.2	3.5	5.0	6.6	83	359	36	5.7	2.8	.65
24	.72	2.4	2.2	3.5	5.0	7.0	104	390	35	5.6	2.7	.60
25	.81	2.6	2.0	4.0	4.0	8.0	96	472	33	5.5	2.5	.60
26	.72	2.5	1.8	4.0	5.0	9.0	73	405	30	5.4	2.3	.60
27	.82	2.5	1.6	4.0	4.0	10	75	411	28	5.4	2.2	.55
28	.64	2.0	1.8	3.0	4.0	12	91	400	26	5.2	2.0	.55
29	.74	2.5	2.0	2.0	---	11	89	380	22	5.2	1.9	.55
30	.75	2.6	2.0	1.0	---	10	103	274	18	5.0	1.8	.46
31	.82	---	2.0	1.0	---	9.0	---	222	---	5.0	1.7	---
TOTAL	16.67	51.35	54.8	93.9	120.6	188.1	1480.0	7405	2710	270.4	92.1	25.36
MEAN	.54	1.71	1.77	3.03	4.31	6.07	49.3	239	90.3	8.72	2.97	.85
MAX	.83	2.6	2.6	5.4	7.0	12	104	472	182	18	4.8	1.6
MIN	.30	.60	1.0	1.0	1.0	3.0	6.0	90	18	5.0	1.7	.46
AC-FT	33	102	109	186	239	373	2940	14690	5380	536	183	50

CAL YR 1978 TOTAL 15775.38 MEAN 43.2 MAX 540 MIN .30 AC-FT 31290

WTR YR 1979 TOTAL 12508.28 MEAN 34.3 MAX 472 MIN .30 AC-FT 24810

09250510 TAYLOR CREEK AT MOUTH, NEAR AXIAL, CO

LOCATION.--Lat 40°18'48", long 107°45'57", in NW¼SW¼ sec.14, T.4 N., R.93 W., Moffatt County, Hydrologic Unit 14050002, on right bank 500 ft upstream from confluence with Wilson Creek, about 1,000 ft (300 m) southwest of Gossard ranch house, and 2 mi (3.2 km) north of Axial.

DRAINAGE AREA.--7.22 mi² (18.70 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1975 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,300 ft (1,920 m), from topographic map.

REMARKS.--Records excellent except for periods of flow, which are poor. No diversions. Low dam to prevent erosion 50 ft (15 m) upstream.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8.0 ft³/s (0.23 m³/s) May 21, 1979, gage height, 2.49 ft (0.759 m); no flow most days each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 8.0 ft³/s (0.23 m³/s) at 1215 May 21, gage height, 2.49 ft (0.759 m); no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	1.1	.30	.36	.02
2	.00	.00	.00	.00	.00	.00	.00	.00	.72	.29	.36	.02
3	.00	.00	.00	.00	.00	.00	.00	.00	.60	.29	.35	.02
4	.00	.00	.00	.00	.00	.00	.00	.00	.51	.28	.35	.01
5	.00	.00	.00	.00	.00	.00	.00	.00	.50	.27	.35	.01
6	.00	.00	.00	.00	.00	.00	.00	.00	.49	.26	.35	.01
7	.00	.00	.00	.00	.00	.00	.00	.02	.49	.25	.05	.01
8	.00	.00	.00	.00	.00	.00	.00	.07	.48	.25	.35	.01
9	.00	.00	.00	.00	.00	.00	.00	.03	.47	.24	.35	.01
10	.00	.00	.00	.00	.00	.00	.00	.00	.46	.23	.33	.01
11	.00	.00	.00	.00	.00	.00	.00	.00	.46	.23	.33	.01
12	.00	.01	.00	.00	.00	.00	.00	.00	.45	.22	.33	.01
13	.00	.00	.00	.00	.00	.00	.00	.00	.44	.21	.34	.01
14	.00	.00	.00	.00	.00	.00	.00	.00	.43	.20	.34	.01
15	.00	.00	.00	.00	.00	.00	.00	.00	.43	.20	.34	.01
16	.00	.00	.00	.00	.00	.00	.00	.00	.42	.19	.34	.01
17	.00	.00	.00	.00	.00	.00	.00	.00	.41	.18	.34	.02
18	.00	.00	.00	.00	.00	.00	.00	.00	.40	.17	.35	.02
19	.00	.00	.00	.00	.00	.00	.00	.00	.39	.16	.36	.02
20	.10	.00	.00	.00	.00	.00	.00	.02	.39	.16	.37	.02
21	.00	.00	.00	.00	.00	.00	.00	1.1	.38	.15	.35	.02
22	.00	.00	.00	.00	.00	.00	.00	.57	.37	.14	.34	.02
23	.04	.00	.00	.00	.00	.00	.00	.80	.36	.13	.34	.02
24	.05	.00	.00	.00	.00	.00	.00	1.7	.36	.12	.34	.02
25	.09	.00	.00	.00	.00	.00	.00	1.8	.35	.12	.34	.02
26	.06	.00	.00	.00	.00	.00	.00	1.8	.34	.11	.33	.02
27	.05	.00	.00	.00	.00	.00	.00	1.7	.33	.10	.33	.02
28	.01	.00	.00	.00	.00	.00	.00	1.6	.33	.09	.33	.02
29	.01	.00	.00	.00	---	.00	.00	1.5	.32	.09	.33	.02
30	.01	.00	.00	.00	---	.00	.00	1.6	.31	.08	.03	.02
31	.00	---	.00	.00	---	.00	---	1.5	---	.07	.33	---
TOTAL	.42	.01	.00	.00	.00	.00	.00	15.81	13.49	5.79	1.33	.47
MEAN	.014	.000	.000	.000	.000	.000	.000	.51	.45	.19	.043	.016
MAX	.10	.01	.00	.00	.00	.00	.00	1.8	1.1	.30	.37	.02
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.31	.07	.03	.01
AC-FT	.8	.02	.00	.00	.00	.00	.00	31	27	11	2.6	.9

CAL YR 1978 TOTAL 0.43 MEAN .001 MAX .10 MIN .00 AC-FT .9
WTR YR 1979 TOTAL 37.32 MEAN .10 MAX 1.8 MIN .00 AC-FT 74

NOTE.--NO GAGE HEIGHT RECORD JUNE 5 TO AUG. 9, AUG. 29 TO SEPT. 6.

09250510 TAYLOR CREEK AT MOUTH, NEAR AXIAL, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--July 1975 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: July 1976 to current year.
WATER TEMPERATURES: July 1976 to current year.

INSTRUMENTATION.--Water-quality monitor since July 1976.

REMARKS.--Daily maximum and minimum specific-conductance data available in district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 2,220 micromhos Oct. 25, 1978; minimum, 371 micromhos Apr. 10, 1977.
WATER TEMPERATURES: Maximum, 32.0°C July 11, 1976; minimum, freezing point many days during winter months each year.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Not determined.
WATER TEMPERATURES: Not determined.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
OCT										
25...	1230	.28	1950	8.2	5.5	9.2	930	570	140	140
APR										
17...	1650	.03	490	7.9	8.5	8.3	190	76	32	27
MAY										
09...	1450	.01	1450	8.3	9.0	8.2	630	340	89	100
21...	1500	2.4	960	7.6	19.0	--	480	190	94	60
SEP										
06...	1115	.01	1380	8.5	13.0	8.3	650	310	63	120

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
OCT										
25...	100	1.4	29	440	0	360	660	39	.7	13
APR										
17...	24	.8	4.6	140	0	110	110	8.3	.2	6.3
MAY										
09...	72	1.2	9.7	360	0	300	420	40	.6	9.8
21...	28	.6	10	350	0	290	220	15	.5	12
SEP										
06...	86	1.5	9.8	--	--	340	480	40	.6	9.3

DATE	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	BORON, DIS-SOLVED (UG/L AS B)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
OCT										
25...	1340	1.82	1.01	.88	.01	230	27000	110	840	30
APR										
17...	282	.38	.02	.12	.02	70	1400	250	40	20
MAY										
09...	925	1.26	.03	1.3	.00	110	3200	20	120	30
21...	623	.85	4.04	2.4	.02	90	14000	10	470	150
SEP										
06...	1010	1.37	.03	.01	.00	150	110	<10	10	<1

09250510 TAYLOR CREEK AT MOUTH, NEAR AXIAL, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)
APR												
17...	1650	1200	20	1	1	0	<1	6	0	22	0	.1
MAY												
09...	1450	370	0	--	--	--	--	--	--	44	0	--
21...	1500	13000	20	1	2	0	0	23	1	23	0	.1
SEP												
06...	1115	110	0	1	1	0	<1	2	1	5	0	.0

DATE	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)
APR											
17...	.0	0	<10	4	0	1	0	20	<3	6.8	4.1
MAY											
09...	--	--	--	--	--	--	--	40	50	9.9	8.3
21...	.0	2	0	20	5	6	6	100	10	--	--
SEP											
06...	.0	1	<10	5	0	0	1	10	<3	13	11

DATE	TIME	PHOS-PHORUS, TOTAL IN BOT. MAT. (MG/KG AS P)	ALUM-INUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS)	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CD)	CHRO-MIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	COBALT, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CO)	COPPER, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CU)
AUG								
01...	0800	600	2800	5	0	5	5	14
01...	0810	750	4200	6	1	10	5	21
01...	0820	800	3800	4	0	5	5	19
01...	0830	390	2600	6	0	10	5	17
01...	0840	430	4200	6	0	10	5	25
01...	0850	390	3600	5	0	6	5	16
01...	0900	600	2000	5	0	4	5	15
01...	0910	600	1200	7	0	2	5	13

DATE	IRON, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS FE)	LEAD, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS PB)	MANGA-NESE, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	MERCURY RECOV. FM BOT-TOM MA-TERIAL (UG/G AS HG)	SELE-NIUM, TOTAL IN BOT-TOM MA-TERIAL (UG/G)	ZINC, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS ZN)	CARBON, ORGANIC TOT. IN BOTTOM MAT. (G/KG AS C)	CARBON, INOR-GANIC, TOT IN BOT MAT (G/KG AS C)
AUG								
01...	5600	10	440	.02	0	64	78	.0
01...	9000	15	540	.03	0	130	130	.2
01...	6800	20	250	.02	0	40	68	.3
01...	10000	17	370	.04	0	38	17	5.2
01...	10000	15	410	.02	0	83	26	6.6
01...	6500	10	260	.02	0	31	18	.0
01...	4000	10	180	.02	0	20	10	5.0
01...	2400	5	280	.02	0	25	14	7.3

09250510 TAYLOR CREEK AT MOUTH, NEAR AXIAL, CO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---						---			---	---
2	---	---						---			---	---
3	---	---						---			---	---
4	---	---						---			---	---
5	---	---						---			---	---
6	---	---						---			---	1450
7	---	---						---			---	---
8	---	---						---			---	---
9	---	---						---			---	---
10	---	---						---			---	---
11	---	---						---			---	---
12	---	1410						---			---	---
13	---	---						---			---	---
14	---	---						---			---	---
15	---	---						---			---	---
16	---	---						---			---	---
17	---	---						---			---	---
18	---	---						---			---	---
19	---	---						---			---	---
20	1400	---						---			---	---
21	---	---						900			---	---
22	---	---						---			1180	---
23	1420	---						---			1230	---
24	1440	---						---			1230	---
25	1920	---						---			1240	---
26	1650	---						---			1240	---
27	1650	---						---			1260	---
28	1720	---						---			---	---
29	1720	---						---			---	---
30	1640	---						---			---	---
31	---	---						---			---	---

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---								
2	---	---	---	---								
3	---	---	---	---								
4	---	---	---	---								
5	---	---	---	---								
6	---	---	---	---								
7	---	---	---	---								
8	---	---	---	---								
9	---	---	---	---								
10	---	---	---	---								
11	---	---	---	---								
12	---	---	.0	.0								
13	---	---	---	---								
14	---	---	---	---								
15	---	---	---	---								
16	---	---	---	---								
17	---	---	---	---								
18	---	---	---	---								
19	---	---	---	---								
20	9.5	8.0	---	---								
21	---	---	---	---								
22	---	---	---	---								
23	6.5	3.0	---	---								
24	12.5	.0	---	---								
25	9.0	.0	---	---								
26	9.0	.0	---	---								
27	9.5	.0	---	---								
28	10.0	.0	---	---								
29	10.5	.0	---	---								
30	7.0	.0	---	---								
31	---	---	---	---								

09250510 TAYLOR CREEK AT MOUTH, NEAR AXIAL, CO--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1			---	---	15.5	9.5	24.0	14.0	---	---		
2			---	---	16.5	10.5	23.5	13.5	---	---		
3			---	---	16.5	11.5	22.0	12.5	---	---		
4			---	---	18.5	12.5	23.0	12.0	---	---		
5			---	---	20.5	13.0	24.0	11.5	---	---		
6			---	---	20.5	13.5	19.5	12.0	---	---		
7			6.0	2.0	19.5	11.5	26.0	5.5	---	---		
8			8.5	.5	12.5	9.5	27.5	7.0	---	---		
9			9.5	1.0	18.0	8.0	---	---	---	---		
10			---	---	22.5	8.0	---	---	---	---		
11			---	---	24.5	10.5	---	---	---	---		
12			---	---	25.5	12.0	---	---	---	---		
13			---	---	23.5	13.5	---	---	---	---		
14			---	---	22.5	13.5	---	---	---	---		
15			---	---	23.0	13.0	---	---	---	---		
16			---	---	24.0	11.0	---	---	---	---		
17			---	---	23.0	11.0	---	---	---	---		
18			---	---	18.5	10.5	---	---	---	---		
19			---	---	13.0	9.5	---	---	---	---		
20			---	---	23.5	8.0	---	---	---	---		
21			18.0	11.5	24.0	9.5	---	---	---	---		
22			17.5	13.5	27.5	10.0	---	---	25.5	13.0		
23			18.0	13.0	25.0	8.5	---	---	23.5	9.0		
24			19.5	13.5	26.0	11.5	---	---	25.0	10.5		
25			16.0	12.5	23.5	9.0	---	---	23.0	9.5		
26			19.0	12.0	23.0	12.5	---	---	24.5	8.5		
27			18.0	13.5	---	---	---	---	22.5	9.5		
28			17.5	14.0	28.0	12.5	---	---	---	---		
29			14.0	11.5	---	---	---	---	---	---		
30			14.0	9.5	25.0	12.0	---	---	---	---		
31			13.5	9.5	---	---	---	---	---	---		

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM
OCT										
25...	1230	.28	15300	12	--	--	--	--	--	--
APR										
17...	1650	.03	193	.02	--	--	--	--	--	--
MAY										
09...	1450	.01	304	.01	--	--	--	--	--	--
21...	1500	2.4	3730	24	56	63	84	93	97	100
SEP										
06...	1110	.01	15	<.01	--	--	--	--	--	--

09250600 WILSON CREEK NEAR AXIAL, CO

LOCATION.--Lat 40°18'56", long 107°47'50", in NW¼SW¼ sec.14, T.4 N., R.93 W., Moffatt County, Hydrologic Unit 14050002, on right bank about 300 ft (91 m) west of Gossard ranch house, 660 ft (200 m) downstream from mouth of Taylor Creek, and 2.4 mi (3.9 km) north of Axial.

DRAINAGE AREA.--20.1 mi^2 (52.1 km^2), revised.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1974 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,300 ft (1,920 m), from topographic map.

REMARKS.--Records good.

AVERAGE DISCHARGE.--5 years, 1.79 ft^3/s (0.050 m^3/s), 1,300 acre-ft/yr (1.60 hm^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 46 ft^3/s (1.30 m^3/s) May 21, 1979, gage height, 3.78 ft (1.152 m); minimum discharge, 0.12 ft^3/s (0.003 m^3/s) Jan. 4-9, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 46 ft^3/s (1.30 m^3/s) at 1400 May 21, gage height, 3.78 ft (1.152 m), only peak above base of 20 ft^3/s (0.57 m^3/s); minimum daily, 0.26 ft^3/s (0.007 m^3/s) Nov. 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.36	.38	.39	.39	.39	.45	.90	11	20	3.9	1.5	.85
2	.34	.39	.41	.44	.39	.45	.73	13	15	4.2	1.4	.81
3	.34	.39	.40	.48	.39	.45	.73	15	11	4.2	1.4	.81
4	.34	.36	.39	.48	.39	.45	.63	12	11	4.3	1.5	.77
5	.34	.36	.41	.48	.42	.45	.73	13	10	4.2	1.5	.77
6	.34	.36	.43	.48	.39	.47	.60	16	10	4.2	1.5	.77
7	.34	.36	.44	.50	.40	.51	1.3	21	9.8	4.2	1.5	.77
8	.34	.34	.46	.51	.41	.94	1.3	21	11	3.9	1.5	.81
9	.34	.26	.48	.42	.42	.69	1.3	20	9.8	3.6	1.6	.77
10	.34	.31	.48	.42	.42	.73	1.4	20	8.6	3.4	1.5	.81
11	.34	.36	.42	.45	.42	.66	1.0	17	8.3	3.3	1.5	.77
12	.34	.39	.42	.45	.42	.77	1.2	15	7.8	3.1	1.5	.81
13	.34	.36	.42	.45	.45	.90	1.1	14	7.1	3.0	1.5	.85
14	.34	.36	.45	.46	.45	.90	1.3	14	6.0	2.9	1.5	.81
15	.34	.36	.45	.46	.41	.94	1.7	17	6.2	2.8	1.6	.77
16	.34	.36	.45	.47	.36	.98	2.1	24	5.7	2.7	1.5	.73
17	.36	.39	.48	.47	.36	.94	2.9	31	5.6	2.6	1.5	.66
18	.36	.39	.51	.48	.42	.81	3.9	39	5.3	2.6	1.4	.63
19	.36	.39	.48	.48	.39	.60	4.8	42	5.6	2.6	1.4	.60
20	.45	.42	.45	.48	.39	.63	5.8	43	5.6	2.5	1.5	.60
21	.39	.42	.45	.47	.39	.57	5.3	42	5.7	2.6	1.5	.63
22	.36	.42	.45	.46	.36	.57	6.1	41	5.0	2.5	1.2	.66
23	.39	.42	.45	.45	.37	.57	8.6	40	4.8	2.6	1.1	.63
24	.42	.39	.45	.44	.36	.60	9.6	41	4.7	2.6	.98	.63
25	.44	.39	.42	.42	.39	.60	9.0	41	4.7	2.5	1.0	.60
26	.39	.39	.42	.42	.42	.69	7.9	38	4.3	2.1	.94	.63
27	.41	.39	.42	.42	.44	.85	7.9	37	3.6	1.9	.90	.66
28	.36	.39	.42	.42	.39	1.6	8.8	34	3.6	2.0	.98	.63
29	.36	.39	.42	.42	---	1.2	9.2	33	3.8	1.6	.77	.60
30	.36	.36	.42	.39	---	.98	9.6	31	3.9	1.5	.81	.51
31	.37	---	.45	.42	---	.98	---	25	---	1.5	.85	---
TOTAL	11.24	11.25	13.59	13.98	11.21	22.93	117.42	821	223.5	91.6	41.23	21.35
MEAN	.36	.38	.44	.45	.40	.74	3.91	26.5	7.45	2.95	1.33	.71
MAX	.45	.42	.51	.51	.45	1.6	9.6	43	20	4.3	1.6	.85
MIN	.34	.26	.39	.39	.36	.45	.60	11	3.6	1.5	.77	.51
AC-FT	22	22	27	28	22	45	233	1630	443	182	82	42

CAL YR 1978 TOTAL 396.32 MEAN 1.09 MAX 10 MIN .21 AC-FT 786
WTR YR 1979 TOTAL 1400.30 MEAN 3.84 MAX 43 MIN .26 AC-FT 2780

09250600 WILSON CREEK NEAR AXIAL, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--May 1975 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1975 to current year.
WATER TEMPERATURE: October 1975 to current year.
SUSPENDED-SEDIMENT DISCHARGE: October 1975 to current year.

INSTRUMENTATION.--Water-quality monitor since October 1975. Pumping sediment sampler since October 1975.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 2,780 micromhos Oct. 7, 1975; minimum, 520 micromhos Feb. 9, 1976.
WATER TEMPERATURES: Maximum, 27.5°C Aug. 12, 1976; minimum, 0.0°C on many days during winter months.
SEDIMENT CONCENTRATIONS: Maximum daily, 19,500 mg/L May 21, 22, 1979; minimum daily, 5 mg/L estimated for several days in January 1977, Sept. 18, 1979.
SEDIMENT LOADS: Maximum daily, 2,210 tons (2,000 t) May 20, 21, 1979; minimum daily, 0.00 ton (0.00 t) several days in January 1977.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 2,260 micromhos Mar. 20; minimum not determined.
WATER TEMPERATURES: Maximum, 26.5°C June 28, Aug. 5; minimum, 0.0°C on many days during November to January.
SEDIMENT CONCENTRATIONS: Maximum daily, 19,500 mg/L May 21, 22; minimum daily, 5 mg/L Sept. 18.
SEDIMENT LOADS: Maximum daily, 2,210 tons (2,000 t) May 20, 21; minimum daily, 0.01 ton (0.01 t) Sept. 18.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
OCT										
25...	1545	.57	1900	8.4	8.5	9.9	730	300	110	110
NOV										
09...	1255	.31	2060	8.4	10.0	13.1	840	440	120	130
APR										
05...	1300	.69	2020	8.2	13.5	10.8	770	380	110	120
18...	1220	3.4	1550	7.9	11.0	8.4	470	170	81	65
MAY										
09...	1605	18	1000	8.0	8.0	9.4	330	110	76	35
18...	1330	35	840	7.4	15.0	7.3	320	140	61	40
JUL										
23...	1515	3.2	1400	8.3	20.5	7.5	760	350	72	140
SEP										
06...	1030	.81	1700	8.1	11.0	9.5	690	310	96	110

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
OCT										
25...	160	2.6	14	520	0	430	490	120	.6	15
NOV										
09...	190	2.9	10	480	2	400	570	160	.5	16
APR										
05...	170	2.7	10	480	0	390	510	150	.5	15
18...	130	2.6	7.6	360	0	300	280	160	.4	11
MAY										
09...	77	1.8	7.1	270	0	220	190	83	.4	9.6
18...	58	1.4	29	220	0	180	160	74	.4	9.9
JUL										
23...	58	.9	7.2	500	0	410	420	30	.3	15
SEP										
06...	160	2.6	8.2	--	0	380	500	140	.6	13

09250600 WILSON CREEK NEAR AXIAL, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	BORON, DIS-SOLVED (UG/L AS B)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
OCT										
25...	1280	1.74	1.97	.22	.00	220	9600	40	250	50
NOV										
09...	1440	1.96	1.21	.37	.02	290	240	10	520	100
APR										
05...	1320	1.80	2.46	.34	.02	200	1300	0	160	100
18...	916	1.25	8.41	.71	.00	190	5100	20	280	120
MAY										
09...	618	.84	30.0	1.4	.02	100	37000	40	1300	90
18...	547	.74	51.7	1.1	.00	480	120000	200	4200	180
JUL										
23...	989	1.35	8.76	.00	.05	150	370	170	20	6
SEP										
06...	1260	1.71	2.76	.31	.00	210	150	<10	30	50

DATE	TIME	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)
NOV												
09...	1255	180	20	--	--	--	--	--	--	19	2	--
APR												
05...	1300	1000	20	--	--	--	--	--	--	49	2	--
18...	1220	3900	40	2	1	0	<1	14	0	58	0	.1
MAY												
09...	1605	23000	80	17	1	0	0	31	0	35	0	.4
18...	1330	59000	100	3	1	0	1	250	0	320	1	.3
SEP												
06...	1030	150	0	1	1	0	<1	2	2	6	0	.0

DATE	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)
NOV											
09...	--	--	--	--	--	--	--	10	20	--	3.9
APR											
05...	--	--	--	--	--	--	--	80	20	6.8	6.7
18...	.0	0	<10	10	0	5	1	70	<3	--	13
MAY											
09...	.0	0	0	18	0	5	3	250	20	40	7.0
18...	.0	2	0	180	6	13	3	800	10	--	--
SEP											
06...	.0	0	<10	18	0	10	11	30	10	--	5.3

09250600 WILSON CREEK NEAR AXIAL, CO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1880	1920	1910	---	2010	1940	2090	1030			---	1650
2	1880	1910	1880	---	2010	1930	2150	1010			---	1650
3	1860	1900	1960	---	2010	1900	2150	1040			---	1670
4	1850	1900	1920	---	2010	1880	2100	1080			---	1710
5	1820	1910	1870	---	2030	1890	2050	---			---	1680
6	1840	1890	1860	---	2020	1900	1940	---			---	1670
7	1830	1880	1900	---	2000	1920	1880	---			---	1660
8	1850	1950	1880	---	2010	1710	1910	---			---	1680
9	---	2050	1820	---	2030	1830	1950	---			1530	1710
10	---	1960	1820	---	2040	1820	1930	---			1470	1690
11	---	1920	1840	---	2030	1830	1920	1120			1490	1680
12	---	1910	1810	---	2040	1790	1950	1110			1540	1690
13	---	1940	---	---	2050	1730	1990	1070			1500	1690
14	---	1950	---	---	2050	1810	1990	1030			1500	1700
15	---	1970	---	---	2050	1950	1920	978			1490	1710
16	---	1960	---	---	2050	1930	1770	951			1460	1740
17	---	1960	---	---	2020	1960	1620	893			1460	1770
18	---	1960	---	---	2020	2010	1520	---			1480	1800
19	---	1960	---	2000	2020	2080	1250	---			1470	1810
20	---	1960	---	2010	2020	2090	1360	---			1460	1810
21	---	1960	---	2010	2040	2070	1390	---			1460	1800
22	---	1960	---	1970	2070	2040	1290	---			1520	1800
23	---	1960	---	2000	2070	2090	1110	---			1560	1790
24	---	1960	---	2010	2060	2080	1030	---			1580	1780
25	---	1930	---	1980	2040	2020	1080	---			1570	1760
26	---	1940	---	1990	2060	2000	1160	---			1580	1760
27	---	1930	---	2000	2000	1930	1140	---			1610	1760
28	---	1920	---	2010	1950	1790	1080	---			1600	1770
29	---	1960	---	2010	---	2000	1080	---			1630	1800
30	1920	1960	---	2040	---	2090	1070	---			1650	1890
31	1920	---	---	2030	---	2040	---	---			1600	---

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	16.5	9.5	10.0	2.5	5.0	1.0	---	---	2.5	1.0	7.5	2.5
2	15.5	5.0	9.5	3.0	1.5	.0	---	---	3.5	1.5	9.0	3.5
3	15.0	2.0	10.0	3.5	2.5	.0	---	---	1.5	.5	8.5	1.0
4	15.0	2.5	9.0	2.0	4.0	.5	---	---	2.5	.5	7.0	.5
5	14.5	2.5	8.5	3.0	.0	.0	---	---	1.5	.5	7.5	1.5
6	15.0	2.5	7.5	.5	.0	.0	---	---	3.5	1.5	10.0	4.0
7	15.0	3.5	8.0	1.0	.5	.0	---	---	2.0	1.0	13.5	4.0
8	14.0	3.5	8.5	1.5	.0	.0	---	---	3.0	1.0	5.5	1.5
9	---	---	9.0	1.0	1.0	.0	---	---	3.5	1.0	8.0	1.5
10	---	---	4.5	1.0	3.0	.5	---	---	4.0	1.0	8.5	2.0
11	---	---	5.5	.5	1.5	.0	---	---	4.5	2.5	9.0	2.0
12	---	---	6.0	1.5	3.0	1.5	---	---	5.5	2.5	9.5	2.5
13	---	---	6.0	1.0	---	---	---	---	6.0	3.5	10.0	3.0
14	---	---	5.5	2.0	---	---	---	---	5.5	3.0	9.5	2.5
15	---	---	4.5	3.0	---	---	---	---	5.5	2.5	10.0	2.5
16	---	---	5.5	1.0	---	---	---	---	5.5	2.5	8.0	3.5
17	---	---	4.5	.5	---	---	---	---	5.5	2.5	9.5	3.5
18	---	---	5.0	1.5	---	---	---	---	4.5	1.5	7.5	4.5
19	---	---	7.5	1.0	---	---	3.0	1.0	5.0	2.5	10.5	5.5
20	---	---	6.0	2.0	---	---	2.5	.0	6.0	3.0	9.5	5.5
21	---	---	6.0	1.5	---	---	1.5	.0	6.5	2.5	9.0	5.0
22	---	---	5.0	2.0	---	---	.0	.0	5.5	2.5	9.5	4.5
23	---	---	5.0	1.0	---	---	.5	.0	6.0	2.5	11.5	4.5
24	---	---	4.5	.0	---	---	.5	.0	6.0	3.0	13.0	4.5
25	---	---	5.5	.5	---	---	2.5	.5	5.5	2.0	13.0	5.5
26	---	---	5.0	1.5	---	---	2.0	.5	5.0	2.0	13.0	6.0
27	---	---	4.0	.0	---	---	1.5	.0	8.0	3.5	11.5	7.0
28	---	---	3.0	.0	---	---	1.5	.0	8.0	1.0	7.5	6.0
29	---	---	4.5	1.0	---	---	1.5	.0	---	---	8.0	6.0
30	7.5	3.5	5.0	2.5	---	---	.0	.0	---	---	10.0	6.0
31	10.0	2.0	---	---	---	---	.5	.0	---	---	10.0	5.5

09250600 WILSON CREEK NEAR AXIAL, CO--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	10.5	5.5	13.0	8.0	16.5	10.5	22.5	14.0	24.5	10.0	21.0	8.5
2	10.0	4.5	10.0	6.0	19.5	10.5	22.0	13.5	24.5	10.5	19.5	9.0
3	12.5	4.5	7.0	4.5	19.5	11.5	20.5	12.0	24.5	9.5	20.5	9.0
4	10.0	5.5	13.5	4.0	21.5	13.0	21.5	11.5	25.5	10.0	20.5	9.5
5	15.0	7.0	12.5	7.0	22.0	13.0	23.5	10.5	26.5	11.0	20.5	8.5
6	15.0	7.5	9.5	5.5	21.0	14.0	18.0	11.0	25.5	13.0	20.5	9.0
7	12.5	8.0	5.5	3.5	18.5	14.0	25.0	9.5	26.0	13.5	20.0	9.0
8	14.5	7.0	6.5	3.0	15.0	10.5	22.0	11.5	24.0	14.0	20.0	9.5
9	13.0	7.0	7.0	3.0	18.0	9.5	25.0	9.5	24.5	14.0	18.5	9.5
10	9.5	4.5	8.5	3.5	22.5	10.0	23.5	10.5	22.5	11.5	18.0	11.5
11	6.5	3.5	12.0	4.0	23.5	11.5	24.5	10.5	21.0	9.0	19.5	9.5
12	9.5	4.5	15.0	5.0	25.0	13.5	25.5	11.0	19.5	10.0	18.5	8.0
13	10.0	5.0	17.5	7.0	24.0	14.0	26.0	12.0	18.0	12.0	15.5	7.5
14	14.0	6.0	19.5	8.5	22.5	14.5	25.0	11.0	16.0	10.0	17.0	7.0
15	14.5	7.5	20.0	9.5	23.0	14.0	23.5	11.5	16.0	9.5	17.5	6.5
16	14.5	7.5	17.5	10.5	23.5	11.5	24.0	12.0	15.5	11.5	18.5	6.5
17	14.0	7.0	20.5	10.5	23.0	11.0	25.0	11.5	17.0	8.5	18.0	6.5
18	13.5	7.5	---	---	18.5	11.0	24.0	11.5	15.0	10.0	18.5	7.0
19	12.0	5.5	---	---	13.5	9.5	25.0	10.5	14.0	10.5	18.0	7.5
20	14.5	3.5	---	---	21.5	8.0	23.0	10.5	12.5	10.0	17.0	9.0
21	15.0	5.5	---	---	22.5	10.0	20.0	11.5	18.5	8.5	18.0	7.5
22	16.0	6.0	---	---	25.0	10.5	21.5	13.0	20.0	9.5	17.0	8.0
23	16.0	6.0	---	---	25.5	12.0	21.0	11.0	18.5	9.0	18.0	8.0
24	13.5	7.0	---	---	25.0	11.5	25.0	12.0	19.0	10.0	18.0	8.5
25	13.0	5.5	---	---	22.5	11.5	24.0	11.0	18.5	9.5	15.5	8.5
26	16.0	4.5	---	---	22.5	12.0	24.0	11.5	20.0	9.0	15.0	9.5
27	17.0	5.0	---	---	26.0	11.5	21.5	12.0	18.5	9.5	17.5	8.0
28	14.5	7.0	---	---	26.5	12.5	25.0	13.5	18.5	10.5	16.5	7.0
29	16.5	4.5	---	---	24.5	12.0	23.5	11.0	20.0	9.0	16.5	7.0
30	16.0	6.0	---	---	24.0	14.5	22.5	10.0	15.5	9.0	16.5	6.0
31	---	---	---	---	---	---	24.5	11.0	19.0	9.5	---	---

09250600 WILSON CREEK NEAR AXIAL, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	.36	22	.02	.38	426	.44	.39	85	.09
2	.34	23	.02	.39	118	.12	.41	180	.20
3	.34	45	.04	.39	81	.09	.40	190	.21
4	.34	30	.03	.36	40	.04	.39	242	.25
5	.34	62	.06	.36	47	.05	.41	150	.17
6	.34	92	.08	.36	83	.08	.43	190	.22
7	.34	225	.21	.36	52	.05	.44	110	.13
8	.34	82	.08	.34	136	.12	.46	207	.26
9	.34	123	.11	.26	110	.08	.48	---	.23
10	.34	119	.11	.31	275	.23	.48	150	.19
11	.34	53	.05	.36	320	.31	.42	125	.14
12	.34	45	.04	.39	540	.57	.42	157	.18
13	.34	45	.04	.36	358	.35	.42	147	.17
14	.34	87	.08	.36	710	.69	.45	92	.11
15	.34	53	.05	.36	352	.34	.45	208	.25
16	.34	39	.04	.36	277	.27	.45	71	.09
17	.36	45	.04	.39	204	.21	.48	86	.11
18	.36	62	.06	.39	286	.30	.51	242	.33
19	.36	41	.04	.39	260	.27	.48	---	.27
20	.45	---	.08	.42	343	.39	.45	180	.22
21	.39	86	.09	.42	99	.11	.45	222	.27
22	.36	71	.07	.42	125	.14	.45	157	.19
23	.39	26	.03	.42	133	.15	.45	158	.19
24	.42	45	.05	.39	157	.17	.45	251	.30
25	.44	662	.79	.39	304	.32	.42	330	.37
26	.39	275	.29	.39	42	.04	.42	425	.48
27	.41	550	.61	.39	102	.11	.42	135	.15
28	.36	105	.10	.39	183	.19	.42	---	.23
29	.36	68	.07	.39	575	.61	.42	---	.34
30	.36	51	.05	.36	88	.09	.42	421	.48
31	.37	---	.03	---	---	---	.45	147	.18
TOTAL	11.24	---	3.46	11.25	---	6.93	13.59	---	7.00

09250600 WILSON CREEK NEAR AXIAL, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JANUARY			FEBRUARY			MARCH	
1	.39	80	.08	.39	---	.29	.45	646	.78
2	.44	95	.11	.39	242	.25	.45	---	.70
3	.48	80	.10	.39	178	.19	.45	524	.64
4	.48	89	.12	.39	---	.18	.45	296	.36
5	.48	86	.11	.42	---	.20	.45	587	.71
6	.48	71	.09	.39	178	.19	.47	1260	1.6
7	.50	71	.10	.40	166	.18	.51	282	.39
8	.51	137	.19	.41	732	.81	.94	598	1.5
9	.42	47	.05	.42	448	.51	.69	846	1.6
10	.42	47	.05	.42	342	.39	.73	307	.61
11	.45	108	.13	.42	391	.44	.66	326	.58
12	.45	51	.06	.42	222	.25	.77	373	.78
13	.45	258	.31	.45	970	1.2	.90	---	.55
14	.46	242	.30	.45	765	.93	.90	280	.68
15	.46	122	.15	.41	481	.53	.94	322	.82
16	.47	---	.14	.36	840	.82	.98	322	.85
17	.47	105	.13	.36	825	.80	.94	364	.92
18	.48	---	.10	.42	---	.57	.81	294	.64
19	.48	50	.06	.39	230	.24	.60	252	.41
20	.48	---	.13	.39	265	.28	.63	406	.69
21	.47	---	.16	.39	1180	1.2	.57	308	.47
22	.46	---	.19	.36	410	.40	.57	350	.54
23	.45	---	.21	.37	665	.66	.57	338	.52
24	.44	---	.24	.36	195	.19	.60	325	.53
25	.42	---	.26	.39	445	.47	.60	276	.45
26	.42	---	.28	.42	---	.34	.69	300	.56
27	.42	---	.31	.44	172	.2	.85	412	.95
28	.42	---	.34	.39	621	.65	1.6	798	3.4
29	.42	315	.36	---	---	---	1.2	560	1.8
30	.39	358	.38	---	---	---	.98	180	.48
31	.42	308	.35	---	---	---	.98	170	.45
TOTAL	13.98	---	5.59	11.21	---	13.36	22.93	---	25.96

09250600 WILSON CREEK NEAR AXIAL, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	.90	---	1.1	11	2600	77	20	5000	270
2	.73	---	.75	13	2700	95	15	5600	227
3	.73	---	.75	15	3480	141	11	3400	101
4	.63	---	.48	12	2550	83	11	4100	122
5	.73	165	.75	13	3900	137	10	3400	92
6	.60	---	.43	16	3560	154	10	3900	105
7	1.3	---	2.0	21	3500	198	9.8	2800	74
8	1.3	---	2.0	21	3220	183	11	4000	119
9	1.3	205	2.0	20	3600	194	9.8	5600	148
10	1.4	---	2.3	20	3300	178	8.6	3600	84
11	1.0	---	1.3	17	3100	142	8.3	4200	94
12	1.2	---	1.8	15	2800	113	7.8	4100	86
13	1.1	---	1.5	14	2800	106	7.1	2800	54
14	1.3	---	2.0	14	3750	142	6.0	2200	36
15	1.7	---	3.1	17	7300	335	6.2	2200	37
16	2.1	---	4.6	24	10000	648	5.7	1600	25
17	2.9	---	8.0	31	15500	1300	5.6	1400	21
18	3.9	1170	12	39	17000	1790	5.3	1200	17
19	4.8	2000	26	42	16000	1810	5.6	1400	21
20	5.8	1350	21	43	19000	2210	5.6	1500	23
21	5.3	1300	19	42	19500	2210	5.7	1450	22
22	6.1	1850	30	41	19500	2160	5.0	1400	19
23	8.6	2400	56	40	16000	1730	4.8	1500	19
24	9.6	3150	82	41	14000	1550	4.7	1700	22
25	9.0	2320	56	41	15000	1660	4.7	3000	38
26	7.9	2450	52	38	18000	1850	4.3	1160	13
27	7.9	1800	38	37	11500	1150	3.6	750	7.3
28	8.8	2000	48	34	8500	780	3.6	1200	12
29	9.2	1980	49	33	8000	713	3.8	900	9.2
30	9.6	1940	50	31	10500	879	3.9	650	6.8
31	---	---	---	25	10500	709	---	---	---
TOTAL	117.42	---	573.86	821	---	25427	223.5	---	1924.3

09250600 WILSON CREEK NEAR AXIAL, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JULY			AUGUST			SEPTEMBER	
1	3.9	750	7.9	1.5	170	.69	.85	---	.06
2	4.2	775	8.8	1.4	164	.62	.81	---	.05
3	4.2	742	8.4	1.4	174	.66	.81	16	.03
4	4.3	660	7.7	1.5	162	.66	.77	75	.16
5	4.2	1770	20	1.5	135	.55	.77	53	.11
6	4.2	1730	20	1.5	138	.56	.77	46	.10
7	4.2	738	8.4	1.5	122	.49	.77	60	.12
8	3.9	635	6.7	1.6	102	.44	.81	45	.10
9	3.6	978	9.5	1.6	76	.33	.77	35	.07
10	3.4	552	5.1	1.6	76	.33	.81	28	.06
11	3.3	528	4.7	1.5	94	.38	.77	16	.03
12	3.1	373	3.1	1.5	99	.40	.81	---	.02
13	3.0	504	4.1	1.5	86	.35	.85	9	.02
14	2.9	299	2.3	1.5	59	.24	.81	---	.03
15	2.8	322	2.4	1.6	38	.16	.77	24	.05
16	2.7	276	2.0	1.6	28	.12	.73	---	.05
17	2.6	271	1.9	1.6	32	.14	.66	24	.04
18	2.6	245	1.7	1.4	75	.28	.63	5	.01
19	2.6	251	1.8	1.4	50	.19	.60	31	.05
20	2.5	225	1.5	1.5	82	.33	.60	13	.02
21	2.6	208	1.5	1.5	78	.32	.63	21	.04
22	2.5	---	1.4	1.2	42	.14	.66	---	.04
23	2.6	218	1.5	1.1	---	.09	.63	---	.03
24	2.6	256	1.8	.98	19	.05	.63	---	.03
25	2.5	237	1.6	1.0	---	.05	.60	---	.03
26	2.1	199	1.1	.94	21	.05	.63	---	.03
27	1.9	229	1.2	.90	---	.08	.66	---	.04
28	2.0	195	1.1	.98	---	.12	.63	---	.03
29	1.6	173	.75	.77	58	.12	.60	---	.03
30	1.5	154	.62	.81	73	.16	.51	---	.03
31	1.5	182	.74	.85	37	.08	---	---	---
TOTAL	91.6	---	141.31	41.23	---	9.18	21.35	---	1.51
YEAR	1400.30		28139.46						

09250610 JUBB CREEK NEAR AXIAL, CO

LOCATION.--Lat 40°18'45", long 107°49'18", in SE¼SE¼ sec.15, T.4 N., R.93 W., Moffatt County, Hydrologic Unit 14050002, on right bank about 500 ft (152 m) upstream from unnamed tributary and 2.4 mi (3.9 km) northwest of Axial.

DRAINAGE AREA.--7.53 mi² (19.50 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1975 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,400 ft (1,951 m), from topographic map.

REMARKS.--Records excellent except those for periods of flow, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5.5 ft³/s (0.16 m³/s), Feb. 9, 1976, result of discharge measurement, may have been higher; maximum gage height, 2.30 ft (0.70 m) Feb. 26, 1976 (backwater from ice); no flow many days each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 0.31 ft³/s (0.009 m³/s) sometime during period May 30 to June 14, gage height, 1.92 ft (0.585 m), from recorded range in stage; no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.10	.11	.04	.02
2	.00	.00	.00	.00	.00	.00	.00	.00	.11	.13	.04	.02
3	.00	.00	.00	.00	.00	.00	.00	.00	.11	.13	.04	.01
4	.00	.00	.00	.00	.00	.00	.00	.00	.11	.13	.02	.01
5	.00	.00	.00	.00	.00	.00	.00	.00	.11	.12	.02	.01
6	.00	.00	.00	.00	.00	.00	.01	.00	.12	.12	.02	.01
7	.00	.00	.00	.00	.00	.00	.01	.04	.12	.12	.02	.01
8	.00	.00	.00	.00	.00	.00	.01	.06	.12	.11	.03	.01
9	.00	.00	.00	.00	.00	.00	.01	.06	.13	.09	.02	.01
10	.00	.00	.00	.00	.00	.00	.01	.01	.13	.09	.02	.02
11	.00	.00	.00	.00	.00	.00	.00	.00	.14	.09	.02	.02
12	.00	.00	.00	.00	.00	.00	.00	.00	.14	.09	.02	.01
13	.00	.00	.00	.00	.00	.00	.02	.00	.15	.09	.04	.02
14	.00	.00	.00	.00	.00	.00	.01	.00	.15	.08	.04	.03
15	.00	.00	.00	.00	.00	.00	.01	.00	.17	.08	.04	.02
16	.00	.00	.00	.00	.00	.00	.01	.00	.14	.09	.05	.02
17	.00	.00	.00	.00	.00	.00	.03	.00	.13	.08	.08	.02
18	.00	.00	.00	.00	.00	.00	.01	.00	.13	.09	.05	.02
19	.00	.00	.00	.00	.00	.00	.01	.01	.18	.09	.08	.02
20	.00	.00	.00	.00	.00	.00	.00	.01	.19	.09	.09	.02
21	.00	.00	.00	.00	.00	.00	.00	.02	.17	.09	.09	.02
22	.00	.00	.00	.00	.00	.00	.00	.02	.13	.10	.06	.02
23	.00	.00	.00	.00	.00	.00	.00	.02	.13	.11	.04	.01
24	.00	.00	.00	.00	.00	.00	.00	.07	.13	.11	.04	.01
25	.00	.00	.00	.00	.00	.00	.00	.11	.13	.09	.03	.01
26	.00	.00	.00	.00	.00	.00	.00	.07	.12	.08	.03	.02
27	.00	.00	.00	.00	.00	.00	.00	.06	.11	.07	.03	.05
28	.00	.00	.00	.00	.00	.00	.00	.07	.11	.07	.03	.02
29	.00	.00	.00	.00	---	.00	.00	.10	.11	.05	.02	.02
30	.00	.00	.00	.00	---	.00	.00	.10	.11	.05	.02	.02
31	.00	---	.00	.00	---	.00	---	.10	---	.05	.04	---
TOTAL	.00	.00	.00	.00	.00	.00	.15	.93	3.93	2.89	1.21	.53
MEAN	.000	.000	.000	.000	.000	.000	.005	.030	.13	.093	.039	.018
MAX	.00	.00	.00	.00	.00	.00	.03	.11	.19	.13	.09	.05
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.10	.05	.02	.01
AC-FT	.00	.00	.00	.00	.00	.00	.3	1.8	7.8	5.7	2.4	1.1

CAL YR 1978 TOTAL 0.94 MEAN .003 MAX .12 MIN .00 AC-FT 1.9
WTR YR 1979 TOTAL 9.64 MEAN .026 MAX .19 MIN .00 AC-FT 19

NOTE.--NO GAGE-HEIGHT RECORD APR. 2, 5, MAY 30 TO JUNE 14.

09250610 JUBB CREEK NEAR AXIAL, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--July 1975 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: July 1976 to current year.
WATER TEMPERATURES: July 1976 to current year.

INSTRUMENTATION.--Water-quality monitor since July 1976.

REMARKS.--Daily maximum and minimum specific-conductance data available in district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 2,780 micromhos Dec. 8, 1977; minimum, 819 micromhos Oct. 7, 1977.
WATER TEMPERATURES: Maximum, 28.0°C May 20, 1978; minimum, 0.5°C on many days during winter months.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 1,650 micromhos Sept. 27; minimum, 1,010 micromhos Apr. 18.
WATER TEMPERATURES: Maximum, 26.5°C May 21; minimum, 0.5°C May 8, 9.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
MAY										
09...	1410	.06	1400	8.1	8.0	9.0	630	250	86	100
18...	1235	.02	1500	8.0	23.5	7.2	760	360	89	130
JUL										
23...	1345	.12	1470	8.5	17.5	7.7	520	210	86	75
SEP										
06...	0940	.01	1500	8.3	9.0	8.1	770	340	79	140

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
MAY										
09...	69	1.2	6.1	460	0	380	380	24	.3	12
18...	65	1.0	6.9	490	0	400	420	29	.4	11
JUL										
23...	120	2.3	8.2	380	0	310	320	110	.4	14
SEP										
06...	85	1.3	6.9	--	0	430	520	36	.4	16

DATE	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	BORON, DIS-SOLVED (UG/L AS B)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
MAY										
09...	905	1.23	.15	.11	.00	110	230	10	10	2
18...	993	1.35	.05	.03	.02	160	270	20	10	10
JUL										
23...	924	1.26	.30	.65	--	160	2100	0	130	30
SEP										
06...	1140	1.55	.03	.03	.01	160	80	10	10	2

09250610 JUBB CREEK NEAR AXIAL, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)
MAY 09...	1410	230	20	1	1	2	<1	0	0	9	0	.2
SEP 06...	0940	170	0	1	1	0	<1	2	4	2	0	.0

DATE	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON ORGANIC DISSOLVED (MG/L AS C)
MAY 09...	.0	1	0	6	0	2	2	20	20	--	9.9
SEP 06...	.0	0	<10	4	3	1	1	10	<3	11	11

DATE	TIME	PHOSPHORUS, TOTAL IN BOT. MAT. (MG/KG AS P)	ALUMINUM, RECOV. FM BOTTOM MATERIAL (UG/G)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)
AUG 02...	1100	600	1100	5	0	7	5	12

DATE	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG)	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	CARBON, ORGANIC TOT. IN BOTTOM MAT. (G/KG AS C)	CARBON, INORGANIC, TOT IN BOT MAT (G/KG AS C)
AUG 02...	3600	10	120	.02	0	22	13	6.3

09250610 JUBB CREEK NEAR AXIAL, CO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							---	---	1220	1330	1390	1460
2							---	---	1230	1330	1400	1480
3							---	---	1230	1310	1400	1500
4							---	---	1230	1310	1420	1510
5							---	---	1230	1310	1430	1520
6							---	---	1230	1320	1460	1520
7							1240	1500	1230	1320	1460	1530
8							1200	1430	1190	1320	1470	1530
9							1250	1380	1220	1330	1460	1540
10							1240	1440	1240	1330	1440	1530
11							---	---	1250	1350	1450	1520
12							---	---	1260	1350	1450	1520
13							1270	---	1270	1400	1460	1510
14							1400	---	1270	1390	1420	1500
15							1390	---	1270	1390	1420	1500
16							1280	---	1280	1390	1400	1510
17							1150	---	1280	1380	1380	1510
18							1180	---	1280	1380	1360	1520
19							1370	1480	1270	1370	1330	1530
20							---	1400	1270	1370	1300	1540
21							---	1400	1270	1370	1310	1490
22							---	1390	1290	1380	1350	1540
23							---	1360	1280	1370	1360	1550
24							---	1260	1290	1350	1400	1550
25							---	1320	1300	1370	1420	1530
26							---	1310	1310	1370	1420	1570
27							---	1290	1320	1370	1430	1630
28							---	1270	1320	1380	1450	1570
29							---	1240	1330	1380	1460	1560
30							---	1240	1330	1390	1470	1550
31							---	1230	---	1390	1470	---

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	---	---	20.0	4.5	21.0	14.5	21.0	10.5	19.0	8.5
2	---	---	---	---	21.0	6.0	20.0	13.5	21.5	11.0	19.0	9.5
3	---	---	---	---	20.5	7.0	17.5	11.0	21.5	10.0	19.5	9.0
4	---	---	---	---	22.5	9.5	18.0	11.0	22.5	10.5	20.0	10.5
5	---	---	---	---	23.0	9.5	19.5	10.0	23.5	10.5	19.5	8.5
6	---	---	---	---	23.0	11.5	15.5	10.5	24.0	12.5	18.5	8.0
7	6.0	1.0	4.0	1.5	18.5	10.5	19.5	9.0	23.5	14.0	18.5	9.0
8	7.5	1.0	7.0	.5	13.0	8.5	19.0	11.0	23.0	14.0	19.0	10.5
9	7.5	2.0	8.0	.5	16.0	7.0	20.5	10.0	23.0	15.5	18.0	11.0
10	---	---	7.5	1.0	20.0	6.5	20.5	10.0	23.0	14.5	18.5	13.5
11	---	---	---	---	21.5	9.0	20.5	10.0	21.5	11.0	18.5	11.0
12	---	---	---	---	23.5	10.5	21.5	10.5	22.0	12.0	16.5	8.0
13	5.5	3.0	---	---	23.0	12.0	22.5	11.5	20.0	15.0	13.0	6.5
14	16.5	2.0	---	---	21.0	13.0	22.0	11.0	18.0	12.5	13.5	6.0
15	20.0	4.0	---	---	21.5	12.0	21.5	12.0	17.5	12.0	13.0	5.5
16	11.5	5.0	---	---	22.0	10.0	22.0	12.5	17.0	14.0	14.0	5.5
17	12.5	4.5	---	---	21.5	10.5	22.0	12.5	17.0	11.0	13.5	5.5
18	12.5	6.5	---	---	17.0	12.0	22.0	12.0	16.0	11.5	14.5	6.0
19	9.0	5.5	26.0	16.5	12.0	9.0	21.0	11.0	15.0	12.5	15.0	6.5
20	---	---	26.0	12.0	18.0	7.0	20.5	11.0	14.0	12.0	14.5	9.5
21	---	---	26.5	11.0	20.0	8.5	19.0	12.5	16.5	10.5	14.5	6.5
22	---	---	25.0	11.0	20.5	9.0	21.0	14.5	19.0	11.0	15.0	8.5
23	---	---	26.0	7.0	21.5	10.0	19.5	12.5	18.0	10.0	16.0	8.0
24	---	---	21.0	10.5	21.5	10.5	21.0	13.0	19.0	11.0	16.0	9.0
25	---	---	20.0	10.5	19.5	10.0	21.0	11.5	17.5	10.0	14.5	9.0
26	---	---	25.5	9.5	19.5	11.0	21.5	12.5	18.0	9.0	13.5	10.0
27	---	---	23.0	10.5	21.0	11.0	21.0	12.5	18.5	9.5	15.0	9.0
28	---	---	21.5	13.0	22.5	12.0	23.0	14.0	19.0	11.0	14.0	6.5
29	---	---	15.0	9.0	21.5	11.0	22.5	12.5	19.5	9.0	14.0	6.5
30	---	---	17.5	6.0	21.5	14.5	20.5	10.0	14.5	10.5	13.5	5.5
31	---	---	16.0	6.0	---	---	21.0	11.0	18.5	10.5	---	---

09250610 JUBB CREEK NEAR AXIAL, CO--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
MAY				
09...	1410	.06	1	<.01
18...	1235	.02	1	<.01
JUN				
25...	1340	.16	21	.01
JUL				
23...	1350	.11	4	<.01
SEP				
06...	1000	.01	43	.00

09251000 YAMPA RIVER NEAR MAYBELL, CO

LOCATION.--Lat 40°30'10", long 108°01'45", in NW¼ sec.2, T.6 N., R.95 W., Moffat County, Hydrologic Unit 14050002, on left bank 100 ft (30 m) downstream from bridge on U.S. Highway 40, 2.0 mi (3.2 km) downstream from Lay Creek, and 3.0 mi (4.8 km) east of Maybell.

DRAINAGE AREA.--3,410 mi^2 (8,830 km^2), approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1904 to October 1905, June 1910 to November 1912, April 1916 to current year. Monthly discharge only for some periods, published in WSP 1313. No winter records prior to 1917.

GAGE.--Water-stage recorder. Datum of gage is 5,900.23 ft (1,798.390 m), National Geodetic Vertical Datum of 1929. See WSP 1733 for history of changes prior to Mar. 9, 1937.

REMARKS.--Records good except those for winter period, which are poor. Natural flow of stream affected by transbasin diversions, numerous storage reservoirs, and diversions above station for irrigation of about 65,000 acres (263 km^2) above and about 800 acres (3.24 km^2) below station.

AVERAGE DISCHARGE.--63 years (water years 1917-79), 1,546 ft^3/s (43.78 m^3/s), 1,120,000 acre-ft/yr (1,381 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 17,900 ft^3/s (507 m^3/s) May 19, 1917, gage height, 10.4 ft (3.17 m), from floodmarks, site and datum then in use, from rating curve extended above 12,000 ft^3/s (340 m^3/s); minimum daily, 2.0 ft^3/s (0.057 m^3/s) July 17-19, 1934.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 7,000 ft^3/s (200 m^3/s) and maximums (*):

Date	Time	Discharge (ft^3/s)	(m^3/s)	Gage height (ft)	(m)	Date	Time	Discharge (ft^3/s)	(m^3/s)	Gage height (ft)	(m)
May 30	1930	*13,600	385	9.49	2.893	June 16	1630	9,850	279	8.02	2.444
June 8	1830	10,300	292	8.19	2.496						

Minimum daily discharge, 72 ft^3/s (2.04 m^3/s) Sept. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	187	244	189	220	252	270	847	4730	9170	4660	572	265
2	178	246	193	221	250	271	685	4940	7540	4710	527	250
3	162	245	196	222	250	272	611	5390	7090	4270	505	237
4	152	238	198	223	252	273	553	5630	7500	4010	471	215
5	147	239	202	225	255	276	531	4320	7980	3820	437	196
6	141	242	204	225	257	282	569	4820	8570	3490	422	174
7	143	242	205	226	259	295	748	5950	9300	3150	403	159
8	148	240	205	228	259	294	1080	5730	9900	2950	379	120
9	142	226	207	230	260	308	1410	4910	8970	2770	381	112
10	143	221	207	233	260	320	1780	4470	7180	2550	377	115
11	141	250	208	236	260	340	2020	4220	5960	2260	348	109
12	142	254	209	238	260	360	1530	3740	6110	2090	329	112
13	148	267	210	239	261	375	1230	3580	7050	1910	325	111
14	152	293	210	239	261	400	1150	3590	8070	1760	327	90
15	153	314	210	240	262	420	1230	4490	8940	1650	326	93
16	150	304	210	240	263	443	2290	5900	9400	1520	329	102
17	155	314	211	240	264	460	3640	7150	8920	1400	330	108
18	168	279	212	241	265	475	4510	7890	7930	1340	332	102
19	175	251	214	243	267	502	5650	9020	6890	1070	333	103
20	173	232	215	245	268	530	5490	9200	5660	992	329	97
21	183	236	215	245	268	560	4300	9820	4940	932	439	92
22	209	230	217	245	269	595	4170	10900	4720	864	812	91
23	230	230	217	245	269	640	4290	11200	5030	852	702	85
24	258	228	217	247	270	670	4910	11200	5220	867	558	78
25	279	225	218	248	270	710	5330	11700	5290	925	437	77
26	277	207	217	249	270	750	4740	12700	5210	956	371	82
27	277	195	218	250	270	790	4180	12900	5140	831	333	81
28	272	182	215	252	269	840	4390	12700	5180	769	306	73
29	247	175	216	251	---	971	4700	12900	5000	736	244	72
30	244	176	217	252	---	930	4560	13400	4820	710	270	85
31	245	---	218	251	---	867	---	12200	---	655	253	---
TOTAL	5821	7225	6500	7389	7340	15489	83124	241290	208680	61469	12559	3686
MEAN	188	241	210	238	262	500	2771	7784	6956	1983	405	123
MAX	279	314	218	252	270	971	5650	13400	9900	4710	812	265
MIN	141	175	189	220	250	270	531	3580	4720	655	244	72
AC-FT	11550	14330	12890	14660	14560	30720	164900	478600	413900	121900	24930	7310

CAL YR 1978 TOTAL 734292 MEAN 2012 MAX 11500 MIN 128 AC-FT 1456000
WTR YR 1979 TOTAL 660582 MEAN 1810 MAX 13400 MIN 72 AC-FT 1310000

09251000 YAMPA RIVER NEAR MAYBELL, CO--Continued
(National Stream-Quality Accounting Network Station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1950 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: November 1950 to August 1973, July 1975 to current year.
WATER TEMPERATURE: November 1950 to August 1973, July 1975 to current year.
SUSPENDED-SEDIMENT DISCHARGE: December 1950 to May 1958, October 1975 to September 1976, October 1977 to September 1978.

INSTRUMENTATION.--Water-quality monitor since July 1975.

REMARKS.--Daily maximum and minimum specific-conductance data available in district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 987 micromhos Dec. 9, 1976; minimum daily, 94 micromhos June 14, 1959.
WATER TEMPERATURES: Maximum, 33.0°C Aug. 29, 1976; minimum, freezing point on many days during winter months.
SEDIMENT CONCENTRATIONS: Maximum daily, 6,000 mg/L July 22, 1951; minimum daily, 1 mg/L several days during December 1975 to February 1976.
SEDIMENT LOADS: Maximum daily, 47,100 tons (42,700 t) May 9, 1958; minimum daily, 0.49 ton (0.44 t) Sept. 6, 1976.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 949 micromhos Apr. 16; minimum, 107 micromhos June 19.
WATER TEMPERATURES: Maximum, 27.5°C Aug. 6, Sept. 5, 6; minimum, 0.0°C many days during November to April.
SEDIMENT CONCENTRATIONS: Maximum daily, 1,750 mg/L Apr. 19; minimum daily, 2 mg/L Sept. 19.
SEDIMENT LOADS: Maximum daily, 26,700 tons (24,200 t) Apr. 19; minimum daily, 0.56 ton (0.51 t) Sept. 19.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	NITRO-GEN, DIS-SOLVED (MG/L AS N)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREP-TOCOCCI FECAL, (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)
OCT											
23...	1200	E230	460	7.9	7.0	2.9	9.7	--	K20	60	190
NOV											
28...	1000	E180	465	8.0	.0	5.4	11.0	--	--	--	170
DEC											
14...	1330	210	560	7.5	.0	4.5	10.2	--	K6	K12	210
JAN											
23...	1330	245	485	7.3	.0	6.9	7.5	--	130	57	170
FEB											
26...	1315	270	575	7.2	.0	5.3	9.9	--	--	--	200
MAR											
29...	1200	990	735	7.5	.5	190	10.6	--	K8	--	260
APR											
25...	1115	5120	320	7.4	8.0	170	9.3	--	130	400	120
MAY											
21...	1450	11030	190	7.3	13.0	120	7.9	--	--	--	84
JUN											
19...	1200	6740	108	7.6	11.5	25	8.5	--	--	--	29
JUL											
19...	1000	1060	220	7.3	19.5	5.5	6.8	--	--	--	86
AUG											
29...	0845	284	410	8.3	17.0	1.6	7.2	--	--	--	140
SEP											
25...	0930	76	590	8.1	13.0	2.2	8.3	.47	--	--	190

E ESTIMATED.

K BASED ON NON-IDEAL COLONY COUNT.

09251000 YAMPA RIVER NEAR MAYBELL, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)
OCT 23...	46	48	16	36	1.2	2.4	140	79	23	.2	2.7
NOV 28...	32	41	17	37	1.2	2.4	140	84	16	.2	7.4
DEC 14...	43	49	22	42	1.3	3.3	170	110	14	.2	12
JAN 23...	34	40	18	35	1.2	2.4	140	96	15	.2	13
FEB 26...	110	43	22	40	1.2	2.5	92	140	17	.2	13
MAR 29...	120	45	35	64	1.7	3.4	140	230	21	.2	9.1
APR 25...	40	28	11	17	.7	2.6	75	66	3.6	.1	10
MAY 21...	25	21	7.6	8.1	.4	1.8	59	28	2.2	.2	10
JUN 19...	0	11	.4	6.3	.5	.4	30	16	1.4	.2	6.9
JUL 19...	23	20	8.7	17	.8	1.5	63	42	7.1	.2	6.5
AUG 29...	30	33	14	26	1.0	2.2	110	73	14	.2	2.3
SEP 25...	36	40	21	55	1.8	2.9	150	94	31	.3	1.1

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N)
OCT 23...	279	291	.40	181	.01	--	.00	.99	.99	.52	.47
NOV 28...	288	289	.39	101	.02	--	.00	.51	.51	.05	.46
DEC 14...	365	355	.50	207	.15	--	.06	.35	.41	.04	.37
JAN 23...	309	304	.42	204	.34	--	.35	.11	.46	.00	.50
FEB 26...	366	333	.50	267	.40	--	.18	.20	.38	.03	.35
MAR 29...	496	492	.67	1330	.55	--	.12	.87	.99	.76	.23
APR 25...	210	183	.29	2900	.79	--	.05	1.2	1.2	.61	.59
MAY 21...	132	114	.18	3930	.21	--	.03	1.2	1.2	.70	.50
JUN 19...	75	61	.10	1370	.05	--	.02	.42	.44	.18	.26
JUL 19...	165	141	.22	472	.01	--	.00	.29	.29	.22	.07
AUG 29...	242	231	.33	186	.02	--	.01	.99	1.0	.75	.25
SEP 25...	361	335	.49	74.1	.00	.00	.00	.66	.66	.19	.47

09251000 YAMPA RIVER NEAR MAYBELL, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	PHYTOPLANKTON, TOTAL (CELLS PER ML)	PERIPHYTON BIOMASS ASH WEIGHT G/SQ M	PERIPHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	CHLOR-A PERIPHYTON CHROMOGRAPHIC FLUOROM (MG/M2)	CHLOR-B PERIPHYTON CHROMOGRAPHIC FLUOROM (MG/M2)	BIOMASS CHLOROPHYLL RATIO PERIPHYTON (UNITS)
OCT 23...	1.0	.02	.01	4.0	--	--	9.30	11.3	1.51	.057	--
NOV 28...	.53	.05	.03	--	3.9	1500	--	--	--	--	--
DEC 14...	.56	.04	.03	3.4	--	--	.100	.380	.024	.006	--
JAN 23...	.80	.11	.09	3.0	--	--	--	--	--	--	--
FEB 26...	.78	.08	.06	3.4	--	--	--	--	--	--	--
MAR 29...	1.5	.05	.03	--	5.6	2600	--	--	--	--	--
APR 25...	2.0	.31	.03	18	--	--	.550	.630	.000	.000	8.00E+08
MAY 21...	1.4	.40	.03	--	--	64	--	--	--	--	--
JUN 19...	.49	.05	.01	6.8	6.5	52	--	--	--	--	--
JUL 19...	.30	.04	.03	--	--	--	--	--	--	--	--
AUG 29...	1.0	.02	.00	--	--	2600	--	--	--	--	--
SEP 25...	.66	.01	.01	7.7	--	2300	--	--	--	--	--

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	BARIUM, DISSOLVED (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)
NOV 28...	1000	1	0	0	60	0	<1	0	10
MAR 29...	1200	1	0	100	60	2	<1	20	0
JUN 19...	1200	1	1	100	0	0	1	0	0
AUG 29...	0845	1	2	0	70	0	<1	10	0

09251000 YAMPA RIVER NEAR MAYBELL, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)
NOV									
28...	0	<3	2	0	420	20	6	0	40
MAR									
29...	6	<3	10	3	5800	30	24	0	210
JUN									
19...	3	0	1	2	2000	70	7	4	50
AUG									
29...	0	<3	2	1	100	20	9	0	20

DATE	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)	SELF-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
NOV									
28...	30	.0	.0	1	0	0	0	10	4
MAR									
29...	40	.0	.0	2	2	0	0	40	<3
JUN									
19...	0	4.9	4.0	0	0	0	0	10	10
AUG									
29...	4	.0	.0	0	0	0	0	0	<3

09251000 YAMPA RIVER NEAR MAYBELL, CO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	408	445	492	490	504	551	716	---	148	---	326	---
2	416	439	526	489	505	555	760	269	159	---	330	---
3	422	447	543	485	506	553	778	282	158	---	333	---
4	432	445	509	484	506	548	775	301	155	---	338	---
5	440	450	469	480	509	542	784	311	151	---	346	---
6	450	447	503	479	509	542	811	287	137	---	350	---
7	457	457	545	486	506	541	853	250	129	---	352	---
8	468	454	537	490	507	549	878	250	125	---	360	---
9	475	456	537	495	505	556	812	303	137	---	363	---
10	468	465	547	498	508	561	714	362	153	---	367	---
11	467	445	550	496	508	555	707	346	170	---	370	---
12	472	449	580	492	508	558	641	334	166	---	379	---
13	470	448	568	494	505	560	649	342	156	---	386	---
14	468	457	563	497	498	565	738	336	150	---	383	---
15	472	455	552	497	496	580	837	300	144	---	375	---
16	471	450	541	497	500	576	836	252	141	---	373	---
17	470	456	531	491	504	584	617	224	142	---	372	---
18	473	462	508	481	509	637	486	215	146	---	372	---
19	467	461	484	480	522	644	426	209	133	140	380	---
20	467	460	476	486	530	636	381	193	124	231	393	---
21	475	475	475	485	533	628	390	180	145	242	393	---
22	466	485	484	483	553	610	386	171	149	254	396	---
23	452	488	487	482	570	628	376	162	148	261	361	---
24	454	496	488	485	563	617	359	156	131	268	352	---
25	473	494	482	488	558	607	320	151	129	281	344	589
26	443	475	482	489	558	599	313	159	132	272	366	598
27	435	478	486	495	552	612	---	152	137	269	383	598
28	429	479	493	503	544	659	---	145	135	292	396	599
29	429	515	493	506	---	703	---	142	147	310	410	602
30	437	500	487	509	---	729	---	140	159	313	---	606
31	441	---	486	504	---	710	---	138	---	314	---	---

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	17.0	11.5	8.5	5.5	.5	.0	.0	.0	.0	.0	.0	.0
2	17.0	11.0	9.0	5.5	.5	.0	.0	.0	.0	.0	.0	.0
3	16.0	9.0	10.5	6.5	.0	.0	.0	.0	.0	.0	.0	.0
4	16.0	8.5	9.5	6.5	.0	.0	.0	.0	.0	.0	.0	.0
5	16.0	8.5	9.0	6.5	.0	.0	.0	.0	.0	.0	.0	.0
6	15.5	8.5	7.5	4.5	.0	.0	.0	.0	.0	.0	.0	.0
7	16.0	8.5	7.0	3.5	1.5	.0	.0	.0	.0	.0	.0	.0
8	15.5	9.0	7.5	4.0	1.0	1.0	.0	.0	.0	.0	.0	.0
9	16.5	9.0	8.0	3.5	2.0	1.0	.0	.0	.0	.0	.0	.0
10	16.5	9.5	5.0	.5	4.0	1.5	.0	.0	.0	.0	.0	.0
11	16.0	9.5	2.0	.5	.0	.0	.0	.0	.0	.0	.0	.0
12	16.0	9.5	3.0	.5	.0	.0	.0	.0	.0	.0	.0	.0
13	14.5	8.5	2.5	1.0	.0	.0	.0	.0	.0	.0	.0	.0
14	14.0	7.0	2.5	1.5	.0	.0	.0	.0	.0	.0	.0	.0
15	14.0	7.5	1.5	.5	.0	.0	.0	.0	.0	.0	.0	.0
16	12.5	7.5	1.5	.5	.0	.0	.0	.0	.0	.0	.0	.0
17	11.0	7.5	1.5	.5	.0	.0	.0	.0	.0	.0	.0	.0
18	12.5	8.5	1.5	.5	.0	.0	.0	.0	.0	.0	.0	.0
19	13.5	7.5	3.0	.5	.0	.0	.0	.0	.0	.0	.0	.0
20	10.5	8.0	3.0	.5	.0	.0	.0	.0	.0	.0	.0	.0
21	10.5	9.0	3.0	.5	.0	.0	.0	.0	.0	.0	.0	.0
22	10.0	7.0	2.0	.5	.0	.0	.0	.0	.0	.0	1.0	.0
23	9.5	5.5	2.0	.5	.0	.0	.0	.0	.0	.0	1.0	.0
24	10.5	6.5	1.5	.5	.0	.0	.0	.0	.0	.0	2.0	.0
25	10.0	6.5	1.0	.5	.0	.0	.0	.0	.0	.0	2.0	.0
26	8.5	5.0	1.0	.5	.0	.0	.0	.0	.0	.0	2.5	.0
27	9.0	5.5	1.0	.0	.0	.0	.0	.0	.0	.0	1.5	.0
28	9.0	5.5	.5	.5	.0	.0	.0	.0	.0	.0	.5	.0
29	9.5	5.5	.5	.0	.0	.0	.0	.0	---	---	1.0	.0
30	8.0	5.5	.5	.0	.0	.0	.0	.0	---	---	2.0	.0
31	8.5	4.5	---	---	.0	.0	.0	.0	---	---	2.0	.0

09251000 YAMPA RIVER NEAR MAYBELL, CO--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	1.5	.0	---	---	11.5	9.0	---	---	24.5	20.0	---	---
2	5.0	.5	9.5	8.0	12.5	10.0	---	---	24.5	20.0	---	---
3	6.5	2.0	8.0	6.5	13.5	11.5	---	---	24.5	20.5	---	---
4	5.5	3.5	8.0	6.0	14.5	12.5	---	---	25.5	20.0	---	---
5	8.5	4.0	11.0	8.0	14.5	13.0	---	---	26.0	21.0	---	---
6	10.5	6.0	10.5	8.0	14.5	13.0	---	---	27.5	22.0	---	---
7	11.5	7.5	8.0	6.5	14.0	13.0	---	---	27.0	22.0	---	---
8	11.5	7.5	6.5	5.5	12.5	9.0	---	---	27.0	22.0	---	---
9	10.5	7.5	7.0	5.0	10.0	8.0	---	---	27.5	22.0	---	---
10	8.5	4.5	7.5	6.0	12.0	9.0	---	---	26.0	21.0	---	---
11	4.5	2.5	8.5	7.0	15.0	11.5	---	---	26.0	20.0	---	---
12	5.0	2.5	9.5	6.5	16.0	14.0	---	---	24.5	20.5	---	---
13	6.5	4.0	12.0	8.0	16.0	14.5	---	---	22.0	20.5	---	---
14	9.5	5.0	14.5	10.5	15.5	14.5	---	---	21.5	19.0	---	---
15	12.5	7.5	15.5	12.0	15.0	13.5	---	---	20.5	17.5	---	---
16	12.5	9.0	13.5	11.0	14.5	12.5	---	---	20.5	18.5	---	---
17	11.5	9.0	11.5	11.0	14.5	12.5	---	---	20.0	17.0	---	---
18	10.0	8.5	12.5	11.0	14.0	12.5	---	---	20.0	17.5	---	---
19	8.5	8.0	12.5	11.5	12.5	10.0	23.5	20.0	19.0	17.5	---	---
20	7.5	6.0	12.5	11.5	12.0	9.0	23.5	20.0	18.5	16.5	---	---
21	8.5	7.0	13.0	12.5	15.0	10.5	23.0	20.5	19.5	15.5	---	---
22	9.0	7.5	12.5	11.5	17.0	14.0	22.5	20.0	21.0	17.0	---	---
23	10.0	8.0	13.0	11.5	17.5	15.5	22.5	19.5	22.0	18.0	---	---
24	9.5	8.5	12.5	12.0	17.0	15.5	24.5	20.0	22.0	18.0	---	---
25	8.5	7.5	12.5	11.0	17.0	15.5	24.5	20.5	22.0	18.5	20.5	15.5
26	8.0	7.0	13.5	11.5	17.0	15.5	24.0	20.5	22.5	18.5	19.5	14.5
27	---	---	13.5	13.0	18.0	15.5	24.5	20.5	22.0	18.5	21.5	12.5
28	---	---	13.5	13.0	18.5	16.0	25.0	21.0	22.0	18.0	21.0	11.0
29	---	---	13.0	10.5	19.0	16.5	24.0	20.5	19.0	17.5	20.5	10.5
30	---	---	10.5	9.0	18.0	17.0	23.5	19.5	---	---	20.5	10.0
31	---	---	10.5	9.5	---	---	24.0	20.0	---	---	---	---

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	187	25	13	244	12	7.9	189	17	8.7
2	178	22	11	246	10	6.6	193	14	7.3
3	162	18	7.9	245	13	8.6	196	15	7.9
4	152	19	7.8	238	27	17	198	38	20
5	147	17	6.7	239	68	44	202	70	38
6	141	66	25	242	26	17	204	23	13
7	143	63	24	242	14	9.1	205	16	8.9
8	148	170	68	240	36	23	205	17	9.4
9	142	30	12	226	14	8.5	207	16	8.9
10	143	30	12	221	96	57	207	15	8.4
11	141	18	6.9	250	56	38	208	15	8.4
12	142	11	4.2	254	20	14	209	---	10
13	148	11	4.4	267	---	11	210	24	14
14	152	9	3.7	293	10	7.9	210	11	6.2
15	153	60	25	314	28	24	210	13	7.4
16	150	12	4.9	304	116	95	210	15	8.5
17	155	14	5.9	314	14	12	211	15	8.5
18	168	14	6.4	279	9	6.8	212	17	9.7
19	175	19	9.0	251	35	24	214	18	10
20	173	30	14	232	32	20	215	35	20
21	183	21	10	236	28	18	215	17	9.9
22	209	38	21	230	26	16	217	18	11
23	230	37	23	230	35	22	217	17	10
24	258	34	24	228	30	18	217	23	13
25	279	20	15	225	67	41	218	21	12
26	277	16	12	207	43	24	217	19	11
27	277	17	13	195	25	13	218	21	12
28	272	20	15	182	24	12	215	143	83
29	247	15	10	175	19	9.0	216	132	77
30	244	116	76	176	23	11	217	122	71
31	245	20	13	---	---	---	218	17	10
TOTAL	5821	---	503.8	7225	---	635.4	6500	---	553.1

09251000 YAMPA RIVER NEAR MAYBELL, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JANUARY			FEBRUARY			MARCH	
1	220	13	7.7	252	17	12	270	20	15
2	221	15	9.0	250	12	8.1	271	30	22
3	222	13	7.8	250	11	7.4	272	22	16
4	223	40	24	252	9	6.1	273	16	12
5	225	26	16	255	9	6.2	276	16	12
6	225	23	14	257	10	6.9	282	22	17
7	226	19	12	259	14	9.8	295	17	14
8	228	17	10	259	22	15	294	20	16
9	230	16	9.9	260	15	11	308	36	30
10	233	32	20	260	13	9.1	320	20	17
11	236	41	26	260	17	12	340	15	14
12	238	19	12	260	24	17	360	11	11
13	239	16	10	261	18	13	375	15	15
14	239	35	23	261	29	20	400	26	28
15	240	40	26	262	32	23	420	18	20
16	240	62	40	263	28	20	443	22	26
17	240	18	12	264	35	25	460	22	27
18	241	52	34	265	87	62	475	28	36
19	243	29	19	267	144	104	502	44	60
20	245	17	11	268	86	62	530	60	86
21	245	26	17	268	86	62	560	32	48
22	245	16	11	269	90	65	595	50	80
23	245	20	13	269	88	64	640	48	83
24	247	17	11	270	60	44	670	42	76
25	248	20	13	270	38	28	710	74	142
26	249	17	11	270	56	41	750	200	405
27	250	15	10	270	76	55	790	170	363
28	252	15	10	269	22	16	840	390	885
29	251	12	8.1	---	---	---	971	320	839
30	252	11	7.5	---	---	---	930	190	477
31	251	13	8.8	---	---	---	867	210	492
TOTAL	7389	---	463.8	7340	---	824.6	15489	---	4384

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	847	140	320	4730	235	3000	9170	250	6190
2	685	70	129	4940	320	4270	7540	205	4170
3	611	50	82	5390	255	3710	7090	205	3920
4	553	50	75	5630	350	5320	7500	215	4350
5	531	35	50	4320	220	2570	7980	210	4520
6	569	120	184	4820	270	3510	8570	195	4510
7	748	150	303	5950	360	5780	9300	200	5020
8	1080	220	642	5730	210	3250	9900	225	6010
9	1410	400	1520	4910	170	2250	8970	160	3880
10	1780	670	3220	4470	150	1810	7180	210	4070
11	2020	700	3820	4220	130	1480	5960	250	4020
12	1530	390	1610	3740	170	1720	6110	115	1900
13	1230	160	531	3580	110	1060	7050	165	3140
14	1150	220	683	3590	100	969	8070	170	3700
15	1230	240	797	4490	190	2300	8940	170	4100
16	2290	750	4640	5900	350	5580	9400	165	4190
17	3640	1700	16700	7150	500	9650	8920	110	2650
18	4510	1700	20700	7890	470	10000	7930	65	1390
19	5650	1750	26700	9020	680	16600	6890	70	1300
20	5490	950	14100	9200	595	14800	5660	70	1070
21	4300	370	4300	9820	590	15600	4940	90	1200
22	4170	370	4170	10900	585	17200	4720	90	1150
23	4290	370	4290	11200	525	15900	5030	100	1360
24	4910	700	9280	11200	470	14200	5220	70	987
25	5330	650	9350	11700	415	13100	5290	72	1030
26	4740	290	3710	12700	550	18900	5210	67	942
27	4180	230	2600	12900	470	16400	5140	60	833
28	4390	290	3440	12700	460	15800	5180	126	1760
29	4700	290	3680	12900	460	16000	5000	60	810
30	4560	270	3320	13400	290	10500	4820	60	781
31	---	---	---	12200	255	8400	---	---	---
TOTAL	83124	---	144946	241290	---	261629	208680	---	84953

09251000 YAMPA RIVER NEAR MAYBELL, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JULY			AUGUST			SEPTEMBER	
1	4660	38	478	572	8	12	265	7	5.0
2	4710	45	572	527	8	11	250	8	5.4
3	4270	42	484	505	18	25	237	9	5.8
4	4010	30	325	471	9	11	215	13	7.5
5	3820	58	598	437	18	21	196	15	7.9
6	3490	37	349	422	13	15	174	6	2.8
7	3150	46	391	403	12	13	159	11	4.7
8	2950	53	422	379	18	18	120	22	7.1
9	2770	33	247	381	8	8.2	112	11	3.3
10	2550	80	551	377	8	8.1	115	20	6.2
11	2260	64	391	348	6	5.6	109	2	.59
12	2090	19	107	329	16	14	112	5	1.5
13	1910	22	113	325	37	32	111	11	3.3
14	1760	21	100	327	14	12	90	3	.73
15	1650	33	147	328	20	18	93	4	1.0
16	1520	34	140	329	13	12	102	5	1.4
17	1400	25	94	330	7	6.2	108	8	2.3
18	1340	14	51	332	19	17	102	4	1.1
19	1070	50	144	333	10	9.0	103	2	.56
20	992	12	32	329	14	12	97	3	.79
21	932	13	33	489	38	50	92	4	.99
22	864	37	86	812	30	66	91	4	.98
23	852	18	41	702	29	55	85	6	1.4
24	867	10	23	558	16	24	78	4	.84
25	925	12	30	437	24	28	77	---	.85
26	956	15	39	371	62	62	82	---	.90
27	831	14	31	333	15	13	81	---	.85
28	769	21	44	306	11	9.1	73	---	.80
29	736	14	28	244	7	4.6	72	---	.80
30	710	9	17	270	11	8.0	85	---	1.0
31	655	31	55	263	9	6.4	---	---	---
TOTAL	61469	---	6163	12569	---	606.2	3686	---	78.38
YEAR	660582		232540.28						

09251000 YAMPA RIVER NEAR MAYBELL, CO--Continued

PHYTOPLANKTON ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	NOV 28,78	MAR 29,79	MAY 21,79	JUN 19,79	AUG 29,79	SEP 25,79
TIME	1000	1200	1450	1200	0845	0930
TOTAL CELLS/ML	1500	2600	64	52	2600	2300
DIVERSITY: DIVISION	0.7	0.8	0.0	1.5	1.5	1.3
.CLASS	0.7	0.8	0.0	1.5	1.5	1.3
..ORDER	1.7	1.6	0.0	2.0	1.8	1.5
...FAMILY	1.7	2.1	0.0	2.0	3.2	1.8
....GENUS	0.0	2.1	0.0	2.0	3.3	1.8

ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
CHLOROPHYTA (GREEN ALGAE)												
.CHLOROPHYCEAE												
..CHLOROCOCCALES												
...CHARACIACEAE												
....SCHROEDERIA	22	1	--	-	--	-	--	-	--	-	--	-
...CHLOROCOCCACEAE												
....CHLOROCOCCUM	--	-	--	-	--	-	--	-	330	13	--	-
...OOCYSTACEAE												
....ANKISTRODESMUS	--	-	--	-	--	-	13#	25	430#	17	140	6
....OOCYSTIS	--	-	--	-	--	-	--	-	19	1	--	-
...SCENEDESMACEAE												
....ACTINASTRUM	--	-	--	-	--	-	--	-	--	-	110	5
....CRUCIGENIA	--	-	--	-	--	-	--	-	120	5	--	-
....SCENEDESMUS	180	12	500#	19	--	-	--	-	160	6	--	-
..VOLVOCALES												
...CHLAMYDOMONADACEAE	88	6	--	-	--	-	--	-	--	-	--	-
....CARTERIA	--	-	--	-	--	-	--	-	--	-	27	1
....CHLAMYDOMONAS	--	-	72	3	--	-	--	-	39	2	55	2
...PHACOTACEAE												
....PHACOTUS	--	-	--	-	--	-	--	-	--	-	27	1
CHRYSOPHYTA												
.BACILLARIOPHYCEAE												
..CENTRALES												
...COSCINODISCACEAE												
....CYCLOTELLA	--	-	1200#	47	--	-	13#	25	180	7	69	3
....MELOSIRA	--	-	--	-	--	-	--	-	--	-	14	1
..PENNALES												
...ACHNANTHACEAE												
....COCCONEIS	--	-	--	-	--	-	--	-	78	3	--	-
...CYMBELLACEAE												
....EPITHEMIA	--	-	--	-	--	-	--	-	58	2	14	1
...DIATOMACEAE												
....DIATOMA	--	-	--	-	--	-	--	-	58	2	--	-
...FRAGILARIACEAE												
....SYNEDRA	--	-	--	-	--	-	--	-	640#	25	--	-
...GOMPHONEMATACEAE												
....GOMPHONEMA	--	-	360	14	--	-	--	-	39	2	--	-
...NAVICULACEAE												
....NAVICULA	--	-	--	-	--	-	--	-	58	2	27	1
...NITZSCHIACEAE												
....NITZSCHIA	--	-	290	11	64#	100	13#	25	58	2	230	10
...SURIRELLACEAE												
....SURIRELLA	--	-	140	6	--	-	--	-	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)												
.CYANOPHYCEAE												
..CHROOCOCCALES												
...CHROOCOCCACEAE												
....ANACYSTIS	680#	45	--	-	--	-	13#	25	--	-	--	-
..HORMOGONALES												
...OSCILLATORIACEAE												
....LYNGBYA	550#	36	--	-	--	-	--	-	--	-	--	-
....OSCILLATORIA	--	-	--	-	--	-	--	-	--	-	1500#	68
....SCHIZOTHRIX	--	-	--	-	--	-	--	-	310	12	--	-
EUGLENOPHYTA (EUGLENOIDS)												
.EUGLENOPHYCEAE												
..EUGLENALES												
...EUGLENACEAE												
....EUTREPTIA	--	-	--	-	--	-	--	-	19	1	--	-
....TRACHELOMONAS	--	-	--	-	--	-	--	-	--	-	14	1

NOTE: # - DOMINANT ORGANISM: EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED: LESS THAN 1/2%

09253000 LITTLE SNAKE RIVER NEAR SLATER, CO

LOCATION.--Lat 40°59'58", long 107°08'34", in SW¼NW¼ sec.15, T.12 N., R.87 W., Routt County, Hydrologic Unit 14050003, on left bank just downstream from highway bridge at Focus Ranch, 0.2 mi (0.3 km) downstream from Spring Creek, and 12 mi (19 km) east of Slater.

DRAINAGE AREA.--285 mi^2 (738 km^2).

PERIOD OF RECORD.--October 1942 to September 1947, October 1950 to current year.

REVISED RECORDS.--WSP 1733: 1960.

GAGE.--Water-stage recorder. Datum of gage is 6,831.00 ft (2,082.089 m), National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter period, which are fair. Diversions for irrigation of about 2,000 acres (8.09 km^2) above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--34 years, 227 ft^3/s (6.429 m^3/s), 164,500 acre-ft/yr (203 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,180 ft^3/s (118 m^3/s) Apr. 25, 1974, gage height, 8.95 ft (2.728 m), from recorded range in stage; minimum daily, 8.6 ft^3/s (0.24 m^3/s) Sept. 10, 1944.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,600 ft^3/s (45 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
May 28	2400	*2,920	82.7	7.88	2.402	June 14	2400	2,260	64.0	7.17	2.185
June 6	2400	2,300	65.1	7.20	2.195						

Minimum daily discharge, 16 ft^3/s (0.45 m^3/s) Nov. 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	25	23	24	31	47	28	519	1400	755	58	29
2	23	26	24	23	32	46	28	567	1380	689	54	26
3	22	26	25	22	33	45	28	499	1470	583	58	24
4	25	25	26	23	32	50	29	412	1640	520	53	23
5	23	25	27	24	32	45	30	664	1830	446	49	22
6	23	20	28	26	35	48	40	827	2070	416	45	21
7	23	20	29	28	35	52	50	616	2040	406	42	21
8	23	20	30	28	33	49	53	472	1820	338	40	20
9	23	19	29	27	34	54	59	410	1520	298	51	20
10	23	19	28	26	38	46	63	339	1350	261	46	20
11	23	19	27	26	41	44	57	301	1390	232	43	25
12	23	20	26	27	40	40	51	274	1530	208	37	24
13	22	18	25	29	40	39	49	331	1780	183	36	23
14	22	17	26	30	40	38	55	567	2010	166	42	24
15	23	17	27	30	40	38	77	825	2090	150	52	24
16	23	18	28	32	38	37	105	1130	1870	138	45	24
17	23	18	29	31	38	37	140	1330	1670	129	58	23
18	24	18	30	32	37	37	208	1480	1450	118	47	22
19	25	17	31	32	36	36	242	1650	1290	108	52	22
20	25	17	30	30	40	39	210	1680	1140	103	58	22
21	28	17	29	30	43	33	229	1740	1020	115	52	23
22	42	17	28	31	43	32	270	1800	1010	104	53	23
23	33	16	27	29	43	35	309	1830	1020	94	43	23
24	30	17	26	30	46	31	407	1960	1020	102	38	23
25	34	18	25	33	45	31	372	2080	1010	90	34	23
26	23	19	24	34	44	29	346	2110	996	87	31	24
27	25	20	25	33	46	29	383	2230	955	86	30	30
28	25	21	25	33	45	30	443	2480	905	85	29	32
29	25	22	25	32	---	29	441	2380	851	81	27	29
30	27	22	25	32	---	29	486	1840	795	78	26	28
31	27	---	25	31	---	28	---	1560	---	73	30	---
TOTAL	783	593	832	898	1080	1203	5288	36903	42322	7242	1409	717
MEAN	25.3	19.8	26.8	29.0	38.6	38.8	176	1190	1411	234	45.5	23.9
MAX	42	26	31	34	46	54	486	2480	2090	755	58	32
MIN	22	16	23	22	31	28	28	274	795	73	26	20
AC-FT	1550	1180	1650	1780	2140	2390	10490	73200	83950	14360	2790	1420

CAL YR 1978 TOTAL 112843 MEAN 309 MAX 2400 MIN 16 AC-FT 223800

WTR YR 1979 TOTAL 99270 MEAN 272 MAX 2480 MIN 16 AC-FT 196900

09255000 SLATER FORK NEAR SLATER, CO

LOCATION.--Lat 40°58'57", long 107°22'56", in SW¼NE¼ sec.21, T.12 N., R.89 W., Moffat County, Hydrologic Unit 14050003, on right bank 15 ft (5 m) downstream from highway bridge, 1.0 mi (1.6 km) upstream from mouth, and 1.5 mi (2.4 km) south of Slater.

DRAINAGE AREA.--161 mi² (417 km²).

PERIOD OF RECORD.--May to October, December 1910, March to October 1911, and April to May 1912 (published as Slater Creek), July 1931 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 618: 1910-11. WSP 764: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 6,600 ft (2,012 m), from river-profile map. May 28, 1910, to May 25, 1912, nonrecording gage at site 1.5 mi (2.4 km) upstream at different datum. July 9, 1931, to May 6, 1932, nonrecording gage at site 0.2 mi (0.3 km) downstream at different datum.

REMARKS.--Records good except those for winter period and those for period of no gage-height record, which are fair. Diversions for irrigation of about 500 acres (2.02 km²) above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--48 years (water years 1932-79), 73.7 ft³/s (2.087 m³/s), 53,400 acre-ft/yr (65.8 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,860 ft³/s (52.7 m³/s) May 8, 1974, gage height, 10.75 ft (3.277 m), from peak indicator; maximum gage height, 10.98 ft (3.347 m) May 28, 1979, from floodmark; no flow Aug. 2-10, 1934, Aug. 18, 25-27, 1936, Aug. 29 to Sept. 3, 1954, Aug. 3, 4, 15, 16, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,540 ft³/s (43.6 m³/s) May 28, gage height, 10.98 ft (3.347 m), from floodmark, only peak above base of 430 ft³/s (12 m³/s); minimum daily, 4.6 ft³/s (0.13 m³/s) Sept. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	18	19	20	21	18	22	205	500	250	8.5	5.6
2	13	18	19	20	21	17	22	224	490	210	9.1	4.9
3	14	19	19	20	21	16	20	221	495	180	9.3	4.8
4	14	18	18	20	20	16	23	169	510	170	8.6	4.6
5	14	18	18	21	19	17	23	241	530	160	7.9	4.9
6	14	14	17	21	19	18	28	313	545	140	7.1	4.8
7	14	15	17	21	19	9.0	37	246	650	120	6.8	4.8
8	14	19	17	22	19	20	40	193	600	100	6.3	4.7
9	14	18	18	22	19	20	45	165	515	80	7.2	4.7
10	14	18	19	22	19	21	53	142	480	70	8.0	4.9
11	14	16	20	22	19	21	44	129	475	52	7.2	7.2
12	14	23	20	22	19	22	40	123	500	48	6.0	7.1
13	14	22	20	23	19	24	38	143	550	45	6.2	7.0
14	14	20	20	24	18	22	41	217	600	40	6.3	7.4
15	14	23	20	24	18	23	63	352	650	35	5.3	7.3
16	15	21	20	24	17	23	92	489	600	30	6.6	7.4
17	15	21	20	24	17	22	119	586	550	28	8.6	7.2
18	16	21	20	23	16	22	166	600	505	25	8.7	5.9
19	16	21	20	23	16	20	172	640	475	23	17	5.9
20	16	21	20	22	17	23	120	630	445	19	21	7.3
21	18	21	20	22	18	21	128	620	410	17	32	7.7
22	29	21	20	22	18	22	146	635	410	17	21	7.9
23	27	19	20	22	18	23	169	635	400	15	14	8.0
24	24	18	20	22	18	24	203	650	400	25	11	8.8
25	24	18	20	22	18	23	192	650	400	26	8.4	9.7
26	18	19	20	22	18	23	168	680	400	17	7.5	9.3
27	20	19	20	22	18	24	173	700	370	14	6.7	11
28	19	19	20	22	18	24	187	740	350	14	6.3	11
29	18	19	20	21	---	22	187	780	310	13	5.3	11
30	18	20	20	21	---	21	201	660	270	11	5.0	11
31	18	---	20	21	---	22	---	580	---	10	6.2	---
TOTAL	519	577	601	679	517	643.0	2962	13358	14385	2004	295.1	215.8
MEAN	16.7	19.2	19.4	21.9	18.5	20.7	98.7	431	480	64.6	9.52	7.19
MAX	29	23	20	24	21	24	203	780	650	250	32	11
MIN	13	14	17	20	16	9.0	20	123	270	10	5.0	4.6
AC-FT	1030	1140	1190	1350	1030	1280	5880	26500	28530	3970	585	428

CAL YR 1978 TOTAL 32091.9 MEAN 87.9 MAX 656 MIN 3.8 AC-FT 63650
WTR YR 1979 TOTAL 36755.9 MEAN 101 MAX 780 MIN 4.6 AC-FT 72910

NOTE.--NO GAGE-HEIGHT RECORD MAY 19 TO JULY 18.

09257000 LITTLE SNAKE RIVER NEAR DIXON, WY

LOCATION.--Lat 41°01'42", long 107°32'55", in SE¼NW¼ sec.8, T.12 N., R.90 W., Carbon County, WY, Hydrologic Unit 14050003, on left bank 200 ft (61 m) upstream from highway bridge, 1,000 ft (305 m) upstream from Willow Creek, and 0.8 mi (1.3 km) west of Dixon.

DRAINAGE AREA.--988 mi² (2,559 km²).

PERIOD OF RECORD.--May 1910 to September 1923, March 1938 to current year (no winter records since 1971). Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1243: 1920(M).

GAGE.--Water-stage recorder. Datum of gage is 6,331.22 ft (1,929.756 m), National Geodetic Vertical Datum of 1929. May 27, 1910, to Sept. 30, 1923, nonrecording gage on highway bridge 200 ft (61 m) downstream at datum 2.98 ft (0.908 m) higher. Mar. 15, 1938, to Sept. 30, 1957, water-stage recorder at site 225 ft (69 m) downstream at datum 2.98 ft (0.908 m) higher; Oct. 1, 1957, to June 6, 1968, at site 850 ft (259 m) downstream at present datum; and June 7 to Sept. 30, 1968, at site 225 ft (69 m) downstream at present datum.

REMARKS.--Records good except those for periods of ice-effect, which are poor. Diversions for irrigation of about 9,500 acres (38.4 km²) above station. One diversion above station for irrigation of about 3,000 acres (12.1 km²) below. Transbasin diversions above station.

AVERAGE DISCHARGE.--46 years (water years 1911-23, 1939-71), 514 ft³/s (14.56 m³/s), 372,400 acre-ft/yr (459 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 9,600 ft³/s (272 m³/s) May 25, 1920, gage height, 11.6 ft (3.54 m), present datum; maximum gage height, 11.74 ft (3.578 m) May 30, 1971; no flow Sept. 19, 20, 22, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,200 ft³/s (90.6 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
May 25	1600	*4,940	140	10.20	3.109	June 15	1030	3,830	108	9.27	2.825
June 7	1030	3,800	108	9.25	2.819						

Minimum daily discharge during period of operation, 0.02 ft³/s (0.001 m³/s) Sept. 8, 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	36					144	1460	2300	1040	2.5	4.2
2	15	35					144	1610	2110	966	2.3	4.6
3	14	30					126	1810	2210	834	2.1	1.2
4	14	30					138	1190	2530	702	2.1	.29
5	16	27					157	1560	2790	630	1.9	.13
6	17	27					170	2430	3250	522	1.9	.10
7	19	20					231	1880	3490	518	1.5	.13
8	19	18					263	1440	3050	432	1.2	.02
9	20	24					315	1180	2650	360	1.3	.02
10	23	26					374	1030	2150	311	2.5	.08
11	20	24					315	894	2110	259	2.1	.35
12	18	24					267	870	2380	207	1.7	.81
13	18	23					243	906	2750	170	2.1	.68
14	16	22					259	1430	3240	132	3.1	.35
15	16	20					387	2110	3550	88	2.8	.15
16	16	21					605	2860	3140	59	2.6	.13
17	12	23					804	3290	2770	48	2.5	.10
18	13	26					1060	3500	2390	35	3.8	.08
19	15	35					1270	3870	2060	15	3.4	.04
20	16	43					846	3870	1840	6.0	77	.06
21	21	40					828	3720	1540	5.5	138	.08
22	32	42					924	3880	1440	8.5	92	.20
23	55	44					1010	3770	1440	7.0	50	.68
24	48	47					1300	4020	1450	12	31	1.9
25	43	52					1260	4460	1430	12	19	4.2
26	43	60					1000	4090	1440	9.5	15	8.0
27	36	---					1040	4220	1360	8.0	10	19
28	34	---					1220	4300	1280	5.0	6.5	30
29	35	---					1260	4150	1180	5.5	2.8	21
30	35	---					1360	3650	1050	4.2	1.9	2.1
31	36	---					---	2790	---	3.1	2.1	---
TOTAL	751	---					19320	82240	66420	7416.3	488.9	100.71
MEAN	24.2	---					644	2653	2214	239	15.8	3.36
MAX	55	---					1360	4460	3550	1040	138	30
MIN	12	---					126	870	1050	3.1	1.2	.02
AC-FT	1490	---					38320	163100	131700	14710	970	200

09258000 WILLOW CREEK NEAR DIXON, WY

LOCATION.--Lat 40°54'56", long 107°31'16", on line between secs.8 and 17, T.11 N., R.90 W., Moffat County, Colo., Hydrologic unit 14050003, on right bank 6.2 mi (10.0 km) south of Colorado-Wyoming State line, 8.0 mi (12.9 km) upstream from mouth, and 8.3 mi (13.4 km) south of Dixon.

DRAINAGE AREA.--24 mi^2 (62 km^2), approximately.

PERIOD OF RECORD.--October 1953 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,700 ft (2,042 m), from topographic map.

REMARKS.--Records good except those for winter period, which are fair. One small ditch diverts water above station for irrigation. Regulation by Elk Lake, capacity, 400 acre-ft (493,000 m^3). Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--26 years, 9.66 ft^3/s (0.274 m^3/s), 7,000 acre-ft/yr (8.63 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 319 ft^3/s (9.03 m^3/s) Apr. 25, 1974, gage height, 5.42 ft (1.652 m), from rating curve extended above 160 ft^3/s (4.5 m^3/s); no flow Sept. 17-19, 1955, many days July through September 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 70 ft^3/s (2.0 m^3/s); and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Apr. 18	2100	*212	6.00	4.81	1.467	June 14	2400	98	2.78	3.94	1.201
May 2	1900	204	5.78	4.75	1.448						

Minimum daily discharge, 0.42 ft^3/s (0.012 m^3/s) Nov. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.57	1.6	1.8	1.4	1.3	1.3	13	40	18	36	3.5	1.9
2	.76	1.6	1.7	1.3	1.3	1.3	9.4	81	17	37	6.2	1.6
3	.80	1.6	1.7	1.3	1.3	1.3	5.3	67	21	31	11	1.4
4	1.1	1.6	1.6	1.3	1.3	1.4	3.9	32	29	25	10	1.4
5	1.5	1.4	1.6	1.3	1.3	1.4	5.6	56	37	22	9.9	1.3
6	1.5	.74	1.5	1.3	1.3	1.5	12	51	46	20	9.7	1.3
7	1.5	.47	1.5	1.3	1.3	1.6	14	35	46	19	9.4	1.3
8	1.7	1.5	1.4	1.3	1.3	1.8	15	24	36	17	9.3	1.3
9	1.8	1.3	1.4	1.3	1.3	2.0	17	27	25	16	9.8	1.2
10	1.7	.83	1.3	1.3	1.3	2.2	14	18	20	14	9.0	1.8
11	1.6	.42	1.3	1.3	1.3	2.6	13	17	26	12	8.0	2.1
12	1.7	1.8	1.2	1.3	1.3	3.0	3.0	18	40	10	5.2	1.7
13	1.7	1.1	1.2	1.3	1.3	3.5	9.5	22	61	9.0	3.8	1.6
14	1.4	.49	1.1	1.3	1.3	4.1	26	30	76	7.9	4.0	1.6
15	1.6	1.2	.98	1.3	1.3	5.1	63	42	79	7.0	3.7	1.4
16	1.7	2.0	.77	1.3	1.3	5.7	64	52	61	6.3	3.6	1.4
17	1.8	2.1	.53	1.3	1.3	6.0	87	52	53	5.8	4.2	1.3
18	2.0	3.4	1.5	1.3	1.3	15	106	51	44	6.3	3.5	1.2
19	2.0	3.6	1.4	1.3	1.3	12	58	51	31	7.8	4.8	1.2
20	2.0	3.4	1.4	1.3	1.3	9.7	28	47	23	7.2	7.7	1.3
21	2.8	3.1	1.4	1.3	1.3	9.8	33	46	23	6.8	7.7	1.3
22	3.9	2.8	1.4	1.3	1.3	12	41	44	28	6.9	3.7	1.3
23	2.7	1.9	1.4	1.3	1.3	10	62	43	34	6.4	3.0	1.2
24	2.6	1.8	1.4	1.3	1.3	11	60	44	37	11	2.6	1.2
25	2.5	1.8	1.4	1.3	1.3	14	45	71	38	4.0	2.4	1.2
26	1.9	1.8	1.4	1.3	1.3	21	36	62	44	3.3	2.3	1.3
27	1.8	1.8	1.4	1.3	1.3	30	39	59	45	3.0	2.1	1.8
28	1.8	1.8	1.4	1.3	1.3	26	41	63	43	3.6	1.9	1.6
29	1.8	1.8	1.4	1.3	---	16	37	68	41	4.1	1.9	1.4
30	1.7	1.8	1.4	1.3	---	19	37	38	40	3.9	1.9	1.4
31	1.7	---	1.4	1.3	---	20	---	23	---	3.7	2.3	---
TOTAL	55.63	52.55	42.28	40.4	36.4	271.3	997.7	1374	1162	373.0	168.1	43.0
MEAN	1.79	1.75	1.36	1.30	1.30	8.75	33.3	44.3	38.7	12.0	5.42	1.43
MAX	3.9	3.6	1.8	1.4	1.3	30	106	81	79	37	11	2.1
MIN	.57	.42	.53	1.3	1.3	1.3	3.0	17	17	3.0	1.9	1.2
AC-FT	110	104	84	80	72	538	1980	2730	2300	740	333	85

CAL YR 1978 TOTAL 4481.43 MEAN 12.3 MAX 94 MIN .34 AC-FT 8890
WTR YR 1979 TOTAL 4616.36 MEAN 12.6 MAX 106 MIN .42 AC-FT 9160

09260000 LITTLE SNAKE RIVER NEAR LILY, CO

LOCATION.--Lat 40°32'50", long 108°25'25", in NW¼NE¼ sec.20, T.7 N., R.98 W., Moffat County, Hydrologic Unit 14050003, on left bank 170 ft (52 m) downstream from highway bridge, 6.0 mi (9.7 km) north of Lily, and 10 mi (16 km) upstream from mouth.

DRAINAGE AREA.--3,730 mi² (9,660 km²), approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June to August 1904 (published as "near Maybell"), October 1921 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1713: 1959.

GAGE.--Water-stage recorder. Altitude of gage is 5,685 ft (1,733 m), from river-profile map. June 9 to Aug. 14, 1904, nonrecording gage, and May 5, 1922, to Nov. 30, 1935, water-stage recorder, at site 300 ft (91 m) upstream at different datums.

REMARKS.--Records good except those for winter period, which are poor. Diversions for irrigation of about 21,000 acres (85.0 km²) above station.

AVERAGE DISCHARGE.--58 years, 569 ft³/s (16.11 m³/s), 412,200 acre-ft/yr (508 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,200 ft³/s (402 m³/s) May 27, 1926, gage height, 10.5 ft (3.20 m), site and datum then in use, from rating curve extended above 3,600 ft³/s (100 m³/s); maximum gage height, 11.1 ft (3.38 m), Feb. 13, 1962, from floodmark (backwater from ice); no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,500 ft³/s (99 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
May 31	0100	*4,990	141	5.95	1.814	June 16	1830	3,820	108	5.30	1.615
June 8	1630	3,730	106	5.24	1.597						

Minimum daily discharge, 6.0 ft³/s (0.169 m³/s) Sept. 13, 20, 24, 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	78	78	43	42	52	92	457	1430	3050	1220	47	40
2	72	84	42	42	54	92	578	1520	2530	1180	42	37
3	62	86	42	42	56	92	410	1640	2240	1160	29	34
4	44	86	42	42	57	92	349	1990	2230	1050	29	30
5	13	84	42	42	58	94	299	1670	2390	918	21	27
6	17	79	42	42	60	94	265	1460	2610	817	33	25
7	10	77	42	42	62	94	686	2280	2990	748	18	23
8	16	87	42	42	63	94	918	2180	3390	525	18	17
9	49	81	42	42	64	94	688	1750	3130	595	29	14
10	37	53	42	42	66	94	655	1460	2760	515	21	11
11	26	52	42	42	68	95	668	1320	2280	462	22	8.0
12	47	51	42	42	70	96	831	1160	2080	410	20	7.0
13	35	51	42	42	72	97	587	1080	2200	352	11	6.0
14	53	51	42	42	74	100	587	1020	2470	309	11	7.0
15	59	50	42	43	76	105	573	1160	2990	282	9.4	7.0
16	65	50	42	43	78	110	724	1860	3440	243	11	7.0
17	52	50	42	43	80	115	878	2720	3340	179	9.9	8.0
18	58	50	42	43	83	120	1060	3390	2850	197	14	7.0
19	43	50	42	43	86	140	1290	3730	2500	185	15	7.0
20	44	49	42	43	88	200	1560	3990	2150	161	29	6.0
21	55	49	42	43	91	240	1420	4110	1960	148	68	7.0
22	54	48	42	44	91	290	1140	3850	1190	125	365	7.0
23	49	48	42	44	91	365	1120	3950	1520	105	313	7.0
24	47	47	42	45	91	398	1150	3870	1460	86	250	6.0
25	52	46	42	46	91	376	1310	4130	1490	64	191	6.0
26	84	46	42	47	91	383	1480	4310	1460	66	145	7.0
27	98	45	42	48	91	405	1370	4580	1460	66	114	8.0
28	87	44	42	48	92	437	1180	4340	1430	97	86	53
29	86	43	42	49	---	506	1250	4430	1360	84	64	79
30	84	43	42	50	---	526	1340	4720	1300	70	51	29
31	77	---	42	51	---	527	---	4340	---	49	46	---
TOTAL	1653	1758	1303	1361	2096	6563	26823	85440	68270	12568	2132.3	538.0
MEAN	53.3	58.6	42.0	43.9	74.9	212	894	2756	2276	405	68.8	17.9
MAX	98	87	43	51	92	527	1560	4720	3440	1220	365	79
MIN	10	43	42	42	52	92	265	1020	1190	49	9.4	6.0
AC-FT	3280	3490	2580	2700	4160	13020	53200	169500	135400	24930	4230	1070

CAL YR 1978 TOTAL 254030.4 MEAN 696 MAX 4950 MIN 8.2 AC-FT 503900
WTR YR 1979 TOTAL 210505.3 MEAN 577 MAX 4720 MIN 6.0 AC-FT 417500

NOTE.--NO GAGE-HEIGHT RECORD NOV. 15 TO MAR. 24.

09260000 LITTLE SNAKE RIVER NEAR LILY, CO--Continued
(National Stream-Quality Accounting Network Station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--September 1969 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: July 1975 to current year.
WATER TEMPERATURES: July 1975 to current year.

INSTRUMENTATION:--Water-quality monitor since July 1975.

EXTREMES FOR PERIOD OF RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 2,020 micromhos Oct. 11, 1977; minimum, 122 micromhos June 20, 1978.
WATER TEMPERATURES: Maximum, 31.0°C Aug. 8, 9, 1978; minimum, freezing point on many days during winter months each year.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 1,130 micromhos Sept. 30; minimum, 142 micromhos May 30, June 19, 20.
WATER TEMPERATURES: Maximum not determined; minimum, 0.0°C on many days during October to April.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (NTU)	OXYGEN, DISSOLVED (MG/L)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, (COLS. PER 100 ML)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
OCT 25...	1300	55	750	8.2	4.0	32	--	K20	40	200	0	52
NOV 29...	1200	43	740	7.7	.5	19	--	K380	200	210	7	58
DEC 13...	1400	42	810	7.9	.0	5.7	7.0	K52	K8	270	35	77
JAN 17...	1330	E66	500	7.4	.5	24	--	160	K20	170	0	48
FEB 20...	1420	88	569	7.5	.0	24	9.2	<1	170	170	12	49
MAR 23...	1300	365	500	7.5	4.0	1400	--	--	--	110	0	33
APR 30...	1645	1340	300	7.4	14.0	320	8.3	80	77	100	21	28
MAY 22...	1245	3850	170	7.5	13.5	290	7.8	140	600	69	13	20
JUL 19...	1330	176	480	7.7	27.0	11	6.3	--	35	150	8	41
AUG 29...	1045	72	660	8.3	17.5	92	7.2	73	880	160	0	47
SEP 25...	1130	6.1	1000	8.1	14.5	2.6	8.4	200	K56	270	80	75

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)
OCT 25...	16	91	2.8	3.2	200	160	31	.4	9.0	485	483	.66
NOV 29...	15	77	2.3	2.5	200	120	28	.3	15	461	436	.63
DEC 13...	20	94	2.5	4.0	240	190	34	.4	21	580	585	.79
JAN 17...	12	49	1.6	2.6	170	93	15	.2	18	349	340	.47
FEB 20...	12	56	1.9	2.2	160	100	18	.2	16	360	350	.49
MAR 23...	7.3	73	3.0	2.1	140	120	3.6	.3	10	331	334	.45
APR 30...	8.4	17	.7	.7	84	46	4.9	.2	15	187	171	.25
MAY 22...	4.7	10	.5	1.0	56	21	2.9	.2	9.8	141	104	.19
JUL 19...	11	45	1.6	3.4	140	81	14	.2	14	297	294	.40
AUG 29...	11	79	2.7	3.4	170	150	29	.3	11	432	433	.59
SEP 25...	20	130	3.4	4.5	190	290	46	.3	14	693	694	.94

E ESTIMATED.

K BASED ON NON-IDEAL COLONY COUNT.

09260000 LITTLE SNAKE RIVER NEAR LILY, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	PHYTO-PLANK-TON, TOTAL (CELLS PER ML)
OCT 25...	72.0	.02	.01	.40	.41	.45	.43	.12	.01	4.8	--	--
NOV 29...	53.5	.08	.00	.30	.30	.20	.38	.04	.01	3.7	--	280
DEC 13...	65.8	.06	.01	.24	.25	.28	.31	.06	.03	--	3.7	--
JAN 17...	--	.11	.00	.02	.02	.05	.13	.06	.02	2.9	--	--
FEB 20...	85.5	.15	.04	.16	.20	.28	.35	.06	.02	3.7	--	--
MAR 23...	326	.25	.03	1.8	1.8	.85	2.1	1.3	.02	--	4.4	30
APR 30...	677	.15	.02	1.1	1.1	.40	1.3	.62	.02	18	--	--
MAY 22...	1470	.13	.01	1.3	1.3	.56	1.4	.53	.02	--	6.9	77
JUL 19...	141	.02	.00	.30	.30	.26	.32	.05	.01	--	--	--
AUG 29...	84.0	.00	.00	--	--	1.2	--	.15	.02	--	--	96
SEP 25...	11.5	.00	.00	.44	.44	.12	.44	.01	.01	3.8	--	3900

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)
DEC 13...	1400	2	2	100	80	1	2	0	0
MAR 23...	1300	12	2	400	0	0	0	40	10
MAY 22...	1245	--	1	200	0	1	1	20	0
AUG 29...	1045	2	2	0	70	0	<1	10	0

DATE	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)
DEC 13...	1	<3	4	1	1300	20	12	8	60
MAR 23...	11	1	45	5	37000	20	32	1	790
MAY 22...	6	0	30	10	17000	520	35	15	440
AUG 29...	0	<3	6	1	2900	<10	6	0	90

DATE	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
DEC 13...	20	.2	.0	1	1	0	0	10	8
MAR 23...	10	.1	.0	3	1	0	0	140	20
MAY 22...	20	--	.0	--	1	0	0	70	20
AUG 29...	2	.0	.0	0	0	0	0	10	<3

09260000 LITTLE SNAKE RIVER NEAR LILY, CO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	714	---	---	540	601	688	260	149	178		---
2	---	725	---	---	536	575	675	248	155	180		---
3	---	734	---	---	536	548	646	236	163	183		---
4	---	730	667	---	536	562	640	254	167	186		---
5	---	748	663	---	537	565	667	240	165	192		---
6	---	758	685	---	534	573	692	254	162	196		---
7	---	802	718	---	530	566	734	244	157	204		---
8	---	793	767	---	525	542	801	196	150	---		---
9	---	773	---	---	531	540	690	195	147	---		---
10	---	774	---	---	536	510	588	229	151	---		---
11	---	807	---	---	534	575	525	268	159	---		---
12	---	826	---	---	543	594	550	265	166	---		---
13	---	754	818	---	543	500	544	276	167	---		---
14	---	739	799	---	528	433	589	300	162	---		---
15	---	716	763	---	534	377	575	301	156	---		---
16	---	675	742	---	558	475	596	258	151	---		---
17	---	668	731	540	555	445	592	189	146	---		---
18	---	702	701	538	562	468	548	169	144	---		---
19	---	694	664	534	564	538	484	167	143	---		---
20	743	683	648	534	550	548	424	168	146	---		---
21	722	672	650	537	535	496	369	166	153	---		---
22	695	663	659	539	511	507	397	163	161	---		---
23	703	643	649	531	513	496	421	162	171	---		---
24	737	641	635	534	516	530	387	159	176	---		---
25	760	638	629	538	523	533	349	153	177	---		---
26	751	626	622	532	596	553	314	151	176	---		---
27	722	618	624	532	612	574	288	152	176	---		---
28	713	668	615	538	594	553	293	149	176	---		1040
29	701	688	596	541	---	550	303	146	177	---		927
30	704	648	578	539	---	541	279	143	177	---		740
31	709	---	575	539	---	623	---	146	---	---		---

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	17.5	5.5	12.5	1.5	.0	.0	---	---	.0	.0	.5	.0
2	18.0	5.0	13.5	2.5	.0	.0	---	---	.0	.0	.5	.0
3	17.0	3.0	14.0	4.5	.0	.0	---	---	.0	.0	.5	.0
4	16.5	3.0	12.0	2.5	.0	.0	---	---	.0	.0	.5	.5
5	18.0	3.5	12.0	3.5	.0	.0	---	---	.0	.0	.5	.5
6	18.5	3.0	8.0	.5	.0	.0	---	---	.0	.0	.5	.5
7	18.5	3.5	8.0	.0	.0	.0	---	---	.0	.0	1.0	.5
8	17.5	4.5	10.0	1.0	.0	.0	---	---	.0	.0	.5	.5
9	19.0	4.5	11.0	.0	---	---	---	---	.0	.0	1.0	.5
10	18.0	4.5	3.0	.0	---	---	---	---	.0	.0	1.0	.5
11	18.5	5.0	.5	.0	---	---	---	---	.0	.0	1.0	.5
12	18.0	5.0	.0	.0	---	---	---	---	.0	.0	1.0	.5
13	16.0	2.0	.0	.0	.0	.0	---	---	.0	.0	1.0	.5
14	14.5	1.5	.5	.0	.0	.0	---	---	.0	.0	1.0	.5
15	16.5	2.0	.5	.0	.0	.0	---	---	.0	.0	1.5	.5
16	14.0	2.0	.5	.0	.0	.0	---	---	.0	.0	1.5	.5
17	13.0	3.5	.5	.0	.0	.0	.0	.0	.0	.0	1.5	.5
18	16.5	5.5	.0	.0	.0	.0	.0	.0	.0	.0	1.5	.5
19	16.0	3.5	.5	.0	.0	.0	.0	.0	.0	.0	1.5	1.0
20	10.0	4.0	.5	.0	.0	.0	.0	.0	.0	.0	1.5	1.0
21	11.5	7.5	.5	.0	.0	.0	.0	.0	.0	.0	2.5	1.0
22	8.0	2.0	.5	.0	.0	.0	.0	.0	.0	.0	3.0	1.0
23	12.0	.0	.5	.0	.0	.0	.0	.0	.0	.0	3.0	.0
24	13.0	1.0	.5	.0	.0	.0	.0	.0	.0	.0	6.0	.0
25	10.5	3.0	.0	.0	.0	.0	.0	.0	.0	.0	8.5	.0
26	9.5	.5	.5	.0	.0	.0	.0	.0	.0	.0	9.0	1.5
27	10.5	.5	.0	.0	.0	.0	.0	.0	.5	.0	5.5	2.5
28	11.5	1.0	.0	.0	.0	.0	.0	.0	.0	.0	3.5	2.0
29	11.5	1.5	.0	.0	.0	.0	.0	.0	---	---	3.0	1.0
30	8.0	3.0	.0	.0	.0	.0	.0	.0	---	---	6.5	.5
31	11.5	.5	---	---	.0	.0	.0	.0	---	---	5.5	2.0

09260000 LITTLE SNAKE RIVER NEAR LILY, CO--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	4.5	1.0	15.5	10.0							---	---
2	4.5	.0	12.5	9.5							---	---
3	6.0	.0	10.0	6.5							---	---
4	5.0	.0	11.5	5.5							---	---
5	11.5	1.0	12.5	8.0							---	---
6	12.5	3.0	10.5	7.0							---	---
7	11.0	3.5	8.0	6.0							---	---
8	11.0	3.5	6.5	5.0							---	---
9	10.5	4.0	6.5	3.5							---	---
10	6.5	1.5	8.0	3.5							---	---
11	4.0	.5	8.5	4.5							---	---
12	5.5	.0	13.5	5.0							---	---
13	5.5	.5	16.0	8.0							---	---
14	11.5	1.5	17.5	10.0							---	---
15	14.0	4.5	18.5	12.0							---	---
16	15.0	6.0	15.5	13.0							---	---
17	14.0	8.0	16.0	12.0							---	---
18	12.5	8.0	15.5	12.0							---	---
19	9.5	7.5	16.0	11.5							---	---
20	11.5	5.5	16.0	12.0							---	---
21	12.5	6.5	16.0	12.0							---	---
22	13.0	7.0	19.0	12.0							---	---
23	13.0	7.0	20.5	15.5							---	---
24	12.5	7.5	19.5	4.5							---	---
25	13.5	7.0	---	---							---	---
26	13.0	6.0	---	---							---	---
27	15.0	7.0	---	---							---	---
28	14.0	9.5	---	---							---	---
29	15.0	7.5	---	---							21.5	8.0
30	14.5	9.0	---	---							21.0	8.0
31	---	---	---	---							---	---

09260000 LITTLE SNAKE RIVER NEAR LILY, CO--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT					
07...	1000	10	171	4.6	--
14...	1000	53	133	19	--
21...	1000	55	159	24	--
25...	1025	52	229	32	--
25...	1300	55	--	--	--
28...	1000	87	517	121	96
NOV					
04...	1000	86	222	52	--
11...	1000	52	186	26	--
18...	1000	50	100	13	--
25...	1000	46	97	12	93
29...	1200	43	163	19	35
DEC					
02...	1000	42	54	6.1	94
09...	1015	42	126	14	--
13...	1400	42	630	71	12
16...	1020	42	130	15	--
23...	1000	42	48	5.4	--
30...	1015	42	115	13	--
JAN					
06...	1000	42	51	5.8	--
13...	1000	42	45	5.1	--
17...	1330	E66	--	--	--
20...	1000	43	68	7.9	--
27...	1000	48	69	8.9	--
FEB					
03...	1000	56	35	5.3	--
10...	1000	66	46	8.2	--
17...	1000	80	36	7.8	--
20...	1420	88	2000	475	2
24...	1000	91	38	9.3	--
MAR					
03...	1000	92	50	12	70
10...	1000	94	80	20	97
17...	1000	115	1190	369	93
23...	1300	365	2330	2300	84
24...	1000	398	1780	1910	97
31...	1000	527	7240	10300	92
APR					
07...	1000	686	8490	15700	84
14...	1000	587	3130	4960	98
21...	1000	1420	7890	30300	96
28...	1000	1180	1020	3250	--
30...	1645	1340	2910	10500	40
MAY					
05...	1000	1670	2230	10100	--
12...	1000	1160	481	1510	81
19...	1000	3730	2500	25200	--
22...	1245	3850	2270	23600	51
26...	1000	4310	1100	12800	--
JUN					
02...	1000	2530	1370	9360	--
09...	1000	3130	794	6710	--
19...	1000	2500	691	4660	--
23...	1000	1520	262	1080	--
30...	1000	1300	188	660	--
JUL					
07...	1000	748	99	200	--
19...	1300	185	73	36	23
19...	1330	176	--	--	--
21...	1000	148	126	50	--
28...	1000	97	350	92	--
AUG					
04...	1000	29	89	7.0	--
11...	1000	29	152	12	--
18...	1000	22	113	6.7	--
29...	1045	72	--	--	--
29...	1130	64	190	33	--
SEP					
01...	1000	40	131	14	--
08...	1000	17	106	4.9	--
15...	1000	7.0	65	1.2	--
22...	1000	7.0	23	.43	--
25...	1130	6.1	--	--	--
25...	1220	6.0	40	.65	--
29...	1000	79	470	100	--

E ESTIMATED.

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM
MAR								
10...	1000	94	65	75	94	98	99	100
24...	1000	398	66	79	96	0	99	100

PHYTOPLANKTON ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	NOV 29,78	MAR 23,79	MAY 22,79	AUG 29,79	SEP 25,79
TIME	1200	1300	1245	1045	1130
TOTAL CELLS/ML	280	30	77	96	3900
DIVERSITY: DIVISION	1.2	0.7	0.0	0.8	1.1
.CLASS	1.2	0.7	0.0	0.8	1.1
..ORDER	1.6	0.7	0.0	1.3	1.3
...FAMILY	2.0	0.7	0.0	2.7	1.3
....GENUS	0.0	0.7	0.0	2.7	1.4

ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
CHLOROPHYTA (GREEN ALGAE)										
.CHLOROPHYCEAE										
..CHLOROCOCCALES										
...CHLOROCOCCACEAE										
....CHLOROCOCCUM	--	-	--	-	--	-	15#	16	--	-
...OOCYSTACEAE										
....ANKISTRODESMUS	--	-	--	-	--	-	10	11	69	2
....DICTYOSPHAERIUM	--	-	--	-	--	-	--	-	330	8
..VOLVOCALES										
...CHLAMYDOMONADACEAE	15	5	--	-	--	-	--	-	--	-
....CARTERIA	--	-	--	-	--	-	--	-	27	1
....CHLAMYDOMONAS	--	-	--	-	--	-	--	-	96	2
CHRYSOPHYTA										
.BACILLARIOPHYCEAE										
..CENTRALES										
...COSCINODISCACEAE										
....CYCLOTELLA	29	11	--	-	--	-	10	11	82	2
..PENNALES										
...ACHNANTHACEAE										
....COCCONEIS	--	-	--	-	--	-	5	5	--	-
...CYMBELLACEAE										
....CYMBELLA	--	-	--	-	--	-	5	5	--	-
...FRAGILARIACEAE										
....SYNEDRA	44#	16	--	-	--	-	30#	32	--	-
...NAVICULACEAE										
....NAVICULA	--	-	25#	83	--	-	15#	16	27	1
...NITZSCHIACEAE										
....NITZSCHIA	58#	21	--	-	77#	100	5	5	400	10
CRYPTOPHYTA (CRYPTOMONADS)										
.CRYPTOPHYCEAE										
..CRYPTOMONADALES										
...CRYPTOMONADACEAE										
....CRYPTOMONAS	--	-	5#	17	--	-	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)										
.CYANOPHYCEAE										
..HORMOGONALES										
...NOSTOCACEAE										
....ANABAENA	--	-	--	-	--	-	--	-	2900#	74
...OSCILLATORIACEAE										
....OSCILLATORIA	130#	47	--	-	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM: EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED: LESS THAN 1/2%

09260025 YAMPA RIVER BELOW LITTLE SNAKE RIVER, CO.

WATER-QUALITY RECORDS

LOCATION.--Lat 40°26'21", long 108°28'19", in SW¼SW¼ sec.25, T.6 N., R.99 W., Moffat County, Hydrologic Unit 14050002, 2.1 mi (3.4 km) downstream from Little Snake River, and 6 mi (9.7 km) north of Elk Springs.

PERIOD OF RECORD.--November 1977 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: November 1977 to current year.
WATER TEMPERATURES: November 1977 to current year.

INSTRUMENTATION.--Water-quality monitor since November 1977.

REMARKS.--Daily maximum and minimum specific-conductance data available in district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 861 micromhos Apr. 9, 1979; minimum, 64 micromhos July 13, 1978.
WATER TEMPERATURES: Maximum 27.5°C Aug. 6, 1979; minimum, 0.0°C on many days during winter period.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 861 micromhos Apr. 9; minimum, 131 micromhos July 14.
WATER TEMPERATURES: Maximum, 27.5°C Aug. 6; minimum, 0.0°C on many days during December to March.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	491	535	506	523	559	696	---	217	174	372	---
2	---	497	556	504	521	546	677	290	223	176	380	---
3	478	499	540	505	519	549	695	288	228	177	378	---
4	482	498	547	504	517	557	725	285	227	184	358	---
5	490	493	571	497	521	556	732	287	219	189	400	---
6	494	494	618	494	521	555	727	---	209	189	428	---
7	497	494	635	496	517	537	732	---	199	179	441	---
8	505	504	610	498	517	529	757	---	191	162	450	---
9	513	503	603	502	517	537	822	---	186	164	461	---
10	521	504	611	506	518	538	816	---	192	167	473	---
11	528	498	639	503	517	546	---	---	203	173	480	---
12	537	489	627	502	516	541	---	---	212	182	485	606
13	535	---	616	501	517	529	---	---	212	189	478	611
14	528	---	619	507	513	524	---	---	200	184	460	625
15	525	---	633	512	511	510	---	---	188	---	464	635
16	524	---	624	513	508	467	---	316	180	---	451	646
17	525	---	617	510	505	532	---	265	174	---	433	649
18	531	---	593	510	506	523	---	238	172	---	447	654
19	---	---	561	507	510	537	---	230	170	237	470	660
20	560	---	538	501	513	562	---	214	173	239	461	634
21	559	---	519	496	526	---	---	204	182	252	462	623
22	552	---	507	502	531	---	---	190	196	271	471	622
23	541	---	500	503	537	---	---	184	204	292	471	651
24	548	---	500	500	550	---	---	173	199	306	486	640
25	533	527	500	498	567	---	---	178	189	314	501	591
26	513	521	504	497	574	---	364	208	183	325	485	598
27	522	512	510	501	568	---	---	225	182	312	457	605
28	520	537	511	503	562	---	---	223	181	316	447	610
29	500	539	505	507	---	---	---	220	176	320	437	777
30	496	553	506	515	---	683	---	219	175	350	---	738
31	489	---	508	521	---	694	---	219	---	364	---	---

09260025 YAMPA RIVER BELOW LITTLE SNAKE RIVER, CO--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	16.0	11.5	9.5	6.0	.5	.5	.0	.0	.0	.0	.0	.0
2	15.5	10.5	10.5	6.5	.5	.0	.0	.0	.0	.0	.0	.0
3	15.0	8.5	11.0	7.5	.5	.0	.0	.0	.0	.0	.0	.0
4	14.5	8.0	10.0	6.5	.5	.5	.0	.0	.0	.0	.0	.0
5	14.5	8.0	9.5	7.0	.5	.0	.0	.0	.0	.0	.0	.0
6	14.5	7.5	8.0	5.5	.0	.0	.0	.0	.0	.0	.0	.0
7	15.0	8.0	7.5	4.0	.0	.0	.0	.0	.0	.0	.5	.0
8	15.0	9.0	8.0	4.5	.0	.0	.0	.0	.0	.0	.0	.0
9	15.5	9.5	8.0	4.0	.5	.0	.0	.0	.0	.0	.5	.0
10	15.0	9.0	5.0	.5	.0	.0	.0	.0	.0	.0	.5	.0
11	15.0	9.0	.5	.5	.5	.0	.0	.0	.0	.0	.5	.0
12	15.5	9.0	1.0	.5	.5	.0	.0	.0	.0	.0	.5	.0
13	13.5	7.5	2.0	.5	.5	.0	.0	.0	.0	.0	.5	.0
14	13.0	6.5	1.0	.5	.5	.0	.0	.0	.0	.0	.5	.0
15	13.0	6.5	1.5	.5	.5	.0	.0	.0	.5	.0	.5	.0
16	12.0	6.5	1.5	.5	.0	.0	.0	.0	.5	.0	.5	.5
17	11.0	7.0	1.5	.5	.0	.0	.0	.0	.5	.0	.5	.0
18	9.5	8.0	1.0	.5	.0	.0	.0	.0	.5	.0	.5	.5
19	---	---	1.0	.5	.5	.0	.0	.0	.0	.0	1.0	.5
20	12.0	10.0	1.0	.5	.5	.0	.0	.0	.0	.0	1.0	.5
21	12.0	10.0	1.5	.5	.5	.0	.0	.0	.0	.0	1.0	.5
22	11.0	7.5	1.0	.5	.0	.0	.0	.0	.0	.0	1.5	.5
23	10.0	6.0	1.5	.5	.5	.0	.0	.0	.0	.0	2.0	.5
24	11.0	6.5	1.0	.5	.5	.0	.0	.0	.0	.0	3.0	.5
25	9.5	7.0	1.0	.5	.5	.0	.0	.0	.0	.0	4.5	.5
26	9.5	6.5	1.5	.5	.0	.0	.0	.0	.0	.0	5.5	.5
27	9.5	6.0	1.0	.5	.0	.0	.0	.0	.0	.0	5.0	3.0
28	10.0	6.0	.5	.5	.0	.0	.0	.0	.0	.0	3.5	3.0
29	10.0	6.5	.5	.5	.0	.0	.0	.0	---	---	3.0	2.0
30	8.5	7.0	.5	.5	.0	.0	.0	.0	---	---	5.0	2.0
31	9.0	5.5	---	---	.0	.0	.0	.0	---	---	5.0	2.5

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	4.0	2.5	---	---	12.5	10.0	17.5	16.0	25.5	19.0	---	---
2	4.5	.5	---	---	14.0	11.0	17.0	15.0	25.5	19.0	---	---
3	6.0	1.5	9.0	8.0	15.0	12.0	17.5	15.5	25.5	19.0	---	---
4	6.0	3.5	9.0	7.5	16.0	13.5	18.5	15.0	26.5	17.5	---	---
5	10.0	4.5	12.5	8.0	16.5	14.0	19.0	16.0	26.0	19.5	---	---
6	12.5	7.0	---	---	16.5	14.5	18.0	16.5	27.5	20.5	---	---
7	12.5	8.0	---	---	16.0	14.0	19.5	15.0	27.0	21.5	---	---
8	12.0	8.0	---	---	14.5	11.5	19.0	16.0	26.5	21.5	---	---
9	12.0	9.5	---	---	11.5	9.5	20.0	16.0	27.0	21.5	---	---
10	---	---	---	---	13.0	9.5	19.5	16.5	25.0	20.0	---	---
11	---	---	---	---	15.5	12.0	21.0	16.5	25.5	19.5	---	---
12	---	---	---	---	18.0	14.5	22.0	17.5	24.5	20.5	19.5	14.0
13	---	---	---	---	18.0	16.0	22.5	18.0	23.5	21.0	16.0	10.5
14	---	---	---	---	17.0	15.5	22.0	17.5	22.5	20.0	17.0	8.0
15	---	---	---	---	16.5	15.0	---	---	23.5	19.0	18.5	8.0
16	---	---	15.5	14.0	16.0	14.0	---	---	21.5	20.0	19.5	9.5
17	---	---	14.0	12.5	15.0	13.5	---	---	23.0	18.5	19.0	10.0
18	---	---	14.0	11.5	14.5	13.0	---	---	23.5	19.0	20.5	10.5
19	---	---	14.0	12.0	13.0	11.0	---	---	21.5	19.0	19.0	11.5
20	---	---	14.0	12.0	13.5	10.0	23.0	18.0	19.5	18.0	18.5	12.5
21	---	---	14.0	12.5	15.0	11.5	22.5	18.0	24.0	17.5	18.5	12.0
22	---	---	14.0	12.5	17.0	13.0	21.5	18.0	25.0	20.0	19.0	11.5
23	---	---	14.0	12.5	18.5	15.5	21.5	18.0	23.5	22.0	18.5	11.5
24	---	---	14.0	12.5	19.0	16.5	24.5	18.0	23.5	22.5	18.5	12.0
25	10.0	9.0	14.0	12.5	18.5	16.0	25.5	19.0	23.0	22.5	17.5	11.5
26	---	---	15.0	12.0	17.5	14.5	23.5	19.0	23.0	22.0	17.0	12.5
27	---	---	16.0	13.0	18.0	15.5	24.5	19.0	23.0	22.0	20.0	10.5
28	---	---	15.5	13.5	19.0	16.5	25.0	19.5	22.5	21.0	19.0	10.0
29	---	---	14.5	12.5	19.5	16.5	25.0	19.0	22.5	21.0	17.5	9.5
30	---	---	12.5	10.0	18.5	17.0	24.0	19.0	---	---	17.5	8.5
31	---	---	12.5	9.5	---	---	25.0	19.0	---	---	---	---

09302450 LOST CREEK NEAR BUFORD, CO

LOCATION.--Lat 40°03'01", long 107°28'06", in SE¼SE¼ sec.15, T.1 N., R.90 W., Rio Blanco County, Hydrologic Unit 14050005, on left bank 15 ft (5 m) downstream from highway bridge, 540 ft (165 m) upstream from mouth, 0.5 mi (0.8 km) downstream from Long Park Creek, and 9 mi (14 km) northeast of Buford.

DRAINAGE AREA.--21.5 mi² (55.7 km²), revised.

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 7,560 ft (2,304 m), from topographic map. Oct. 1, 1973, to Sept. 30, 1975, at site 150 ft (46 m) upstream at same datum.

REMARKS.--Records good except those for winter period, which are poor. No diversion above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--15 years, 21.6 ft³/s (0.612 m³/s), 15,650 acre-ft/yr (19.3 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 944 ft³/s (26.7 m³/s) May 9, 1974, gage height, 7.53 ft (2.295 m), from rating curve extended above 260 ft³/s (7.4 m³/s); minimum daily, 0.30 ft³/s (0.008 m³/s) Jan. 9, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 582 ft³/s (16.5 m³/s) at 1630 May 21, gage height, 4.47 ft (1.362 m), only peak above base of 150 ft³/s (4.2 m³/s); minimum daily, 1.1 ft³/s (0.031 m³/s) Sept. 13, 14, 16-19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.8	2.1	2.2	2.2	2.5	2.1	3.2	79	103	14	1.5	1.6
2	1.9	2.1	2.2	2.2	2.4	2.1	3.2	78	102	13	1.5	1.5
3	1.9	2.1	2.4	2.3	2.3	2.0	3.1	64	101	12	1.5	1.4
4	1.9	1.9	2.3	2.2	2.2	2.2	3.2	61	100	12	1.4	1.4
5	1.9	2.0	2.4	2.3	2.4	2.2	3.6	82	101	9.4	1.4	1.3
6	1.9	2.0	2.4	2.2	2.3	2.3	4.1	100	102	8.8	1.4	1.3
7	2.0	1.8	2.4	2.3	2.4	2.4	4.7	81	97	8.0	1.4	1.3
8	1.9	2.1	2.3	2.3	2.3	2.4	5.1	67	84	6.7	1.5	1.3
9	1.9	2.0	2.2	2.1	2.2	2.1	5.6	57	66	5.8	1.6	1.3
10	1.9	2.2	2.2	2.3	2.3	2.2	6.1	48	74	5.3	1.7	1.4
11	1.9	2.1	2.1	2.3	2.2	2.3	6.2	43	74	4.8	1.6	1.6
12	1.9	2.5	2.2	2.3	2.1	2.2	5.7	45	78	4.6	1.6	1.3
13	1.8	2.1	2.1	2.3	2.1	2.1	5.3	57	80	4.4	2.2	1.1
14	1.8	2.5	2.2	2.4	2.0	2.2	5.6	67	79	4.2	2.2	1.1
15	2.0	2.4	2.1	2.4	1.8	2.4	7.8	100	72	4.0	2.1	1.2
16	2.0	2.0	2.1	2.3	1.7	2.4	11	120	63	3.8	2.2	1.1
17	2.0	2.0	2.0	2.3	1.7	2.3	14	177	58	3.6	2.2	1.1
18	2.0	2.0	2.0	2.3	1.8	2.3	19	270	49	3.4	2.2	1.1
19	2.0	2.0	1.9	2.2	2.0	2.2	26	318	45	3.2	2.4	1.1
20	2.2	2.1	1.9	2.3	1.9	2.3	30	333	38	3.0	3.1	1.2
21	2.2	2.1	2.0	2.3	1.9	2.5	30	354	35	2.8	2.9	1.2
22	2.6	2.0	2.0	2.4	2.0	2.5	32	318	33	2.6	2.1	1.2
23	2.3	2.0	1.9	2.4	1.9	2.5	47	327	31	2.4	2.0	1.2
24	2.4	1.9	1.8	2.6	2.0	2.4	59	321	28	2.2	1.8	1.3
25	2.5	2.0	1.9	2.5	2.0	2.6	53	324	26	2.0	1.8	1.3
26	2.1	2.1	2.2	2.4	2.0	2.8	48	344	23	1.9	1.7	1.5
27	2.2	1.9	2.5	2.4	2.0	2.8	53	306	22	1.8	1.7	1.7
28	2.2	2.3	2.3	2.6	2.0	3.0	64	303	19	1.7	1.7	1.5
29	2.1	2.3	2.3	2.6	---	2.9	63	220	17	1.6	1.6	1.6
30	2.1	2.2	2.4	2.4	---	3.0	76	160	16	1.5	1.7	1.6
31	2.1	---	2.2	2.5	---	3.0	---	128	---	1.5	1.8	---
TOTAL	63.4	62.8	67.1	72.6	58.4	74.7	697.5	5352	1816	156.0	57.5	39.8
MEAN	2.05	2.09	2.16	2.34	2.09	2.41	23.3	173	60.5	5.03	1.85	1.33
MAX	2.6	2.5	2.5	2.6	2.5	3.0	76	354	103	14	3.1	1.7
MIN	1.8	1.8	1.8	2.1	1.7	2.0	3.1	43	16	1.5	1.4	1.1
AC-FT	126	125	133	144	116	148	1380	10620	3600	309	114	79

CAL YR 1978 TOTAL 11204.6 MEAN 30.7 MAX 550 MIN 1.5 AC-FT 22220
WTR YR 1979 TOTAL 8517.8 MEAN 23.3 MAX 354 MIN 1.1 AC-FT 16900

09302500 MARVINE CREEK NEAR BUFORD, CO

LOCATION.--Lat 40°02'18", long 107°29'15", in NE¼SE¼ sec.21, T.1 N., R.90 W., Rio Blanco County, Hydrologic Unit 14050005, on right bank 166 ft (50 m) upstream from county road bridge, 1,800 ft (550 m) upstream from mouth, and 8 mi (13 km) northeast of Buford.

DRAINAGE AREA.--59.7 mi² (154.6 km²), revised.

PERIOD OF RECORD.--July 1903 to September 1906, September 1972 to current year.

REVISED RECORDS.--WSP 1313: 1905-6.

GAGE.--Water-stage recorder. Altitude of gage is 7,500 ft (2,286 m), from topographic map. July 28, 1903, to Sept. 30, 1906, nonrecording gage at approximately same site at different datum. Sept. 1, 1972, to Sept. 30, 1973, at site 40 ft (12 m) downstream at datum 1.69 ft (0.515 m) higher. Oct. 1, 1973, to Sept. 30, 1975, at site 126 ft (38 m) downstream at datum 5.0 ft (1.5 m) higher.

REMARKS.--Records good except those for winter period, which are poor. Diversions above station for irrigation of 310 acres (1.25 km²) of hay meadows. One small transbasin diversion above station to Ute Creek basin. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--10 years, 93.2 ft³/s (2.639 m³/s), 67,520 acre-ft/yr (83.3 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 723 ft³/s (20.5 m³/s) June 17, 1905, gage height, 3.50 ft (1.067 m), datum then in use; maximum gage height recorded, 5.39 ft (1.643 m), Dec. 17, 1972, site then in use (backwater from ice); minimum discharge not determined, probably occurred during period of no gage-height record.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 309 ft³/s (8.75 m³/s) at 2200 July 1, gage height, 3.67 ft (1.119 m), only peak above base of 300 ft³/s (8.50 m³/s); minimum daily, 43 ft³/s (1.22 m³/s) Apr. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	72	69	62	63	60	52	46	69	153	270	79	70
2	73	69	60	63	60	52	47	74	152	259	74	70
3	72	69	64	64	60	52	48	71	158	228	79	66
4	72	69	62	64	60	52	43	67	158	203	73	64
5	71	69	60	64	58	52	44	74	165	188	70	62
6	71	69	64	65	58	54	46	82	176	174	69	62
7	72	70	70	65	60	54	48	82	193	164	73	61
8	71	70	72	66	60	54	48	75	184	160	73	62
9	71	70	74	66	60	54	48	67	166	146	74	60
10	70	70	76	66	60	54	49	62	151	139	73	60
11	70	71	78	66	58	54	48	58	155	131	73	60
12	70	77	80	66	58	54	45	59	165	126	70	60
13	69	73	81	64	58	54	44	62	180	121	68	61
14	72	72	80	64	58	54	46	68	207	116	69	61
15	69	68	80	64	58	54	52	77	235	111	70	61
16	66	65	78	64	56	52	56	85	245	111	70	64
17	67	72	76	62	56	52	59	95	237	110	69	66
18	68	70	74	62	56	52	63	115	226	102	70	71
19	67	70	72	62	56	52	59	128	219	100	69	73
20	68	69	70	62	56	53	54	138	185	98	77	73
21	70	65	67	62	54	52	55	148	173	99	74	72
22	75	63	66	62	54	50	60	151	177	99	64	72
23	72	63	64	62	54	50	68	154	179	99	72	74
24	70	64	64	62	54	50	69	163	182	98	83	72
25	72	65	65	62	54	50	65	169	200	97	81	72
26	70	66	64	62	52	48	60	171	216	95	78	76
27	70	63	68	62	52	46	62	172	239	96	77	78
28	72	62	66	62	52	45	66	186	256	94	74	75
29	70	60	64	62	---	45	63	195	246	93	71	75
30	69	65	63	62	---	45	66	179	245	87	75	74
31	69	---	63	62	---	45	---	161	---	79	73	---
TOTAL	2180	2037	2147	1964	1592	1587	1627	3457	5823	4093	2264	2027
MEAN	70.3	67.9	69.3	63.4	56.9	51.2	54.2	112	194	132	73.0	67.6
MAX	75	77	81	66	60	54	69	195	256	270	83	78
MIN	66	60	60	62	52	45	43	58	151	79	64	60
AC-FT	4320	4040	4260	3900	3160	3150	3230	6860	11550	8120	4490	4020

CAL YR 1978 TOTAL 32914 MEAN 90.2 MAX 373 MIN 38 AC-FT 65280
WTR YR 1979 TOTAL 30798 MEAN 84.4 MAX 270 MIN 43 AC-FT 61090

09303000 NORTH FORK WHITE RIVER AT BUFORD, CO

LOCATION.--Lat 39°59'15", long 107°36'50", in NW¼NW¼ sec.9, T.1 S., R.91 W., Rio Blanco County, Hydrologic Unit 14050005, on right bank 600 ft (180 m) east of Buford and 1.2 mi (1.9 km) upstream from South Fork White River.

DRAINAGE AREA.--260 mi^2 (673 km^2), revised.

PERIOD OF RECORD.--May 1910 to December 1915, July 1919 to December 1920, October 1951 to current year. Monthly discharge only for some periods, published in WSP 1313. Published as North Fork White River near Buford prior to 1951 and as White River at Buford 1951-67. Records for July 1903 to December 1906 at site 6.5 mi (10.5 km) upstream not equivalent because of inflow between sites.

REVISED RECORDS.--WSP 1343: 1912.

GAGE.--Water-stage recorder. Altitude of gage is 7,010 ft (2,137 m), from topographic map. May 24, 1910, to May 27, 1914, nonrecording gage at site 1.5 mi (2.4 km) upstream at different datum. May 28, 1914, to Dec. 7, 1915, and July 1, 1919, to Oct. 9, 1920, nonrecording gage at present site at different datum.

REMARKS.--Records good except those for period of no gage-height record, which are poor. Diversions above station for irrigation of about 900 acres (3.64 km^2) above and 300 acres (1.21 km^2) below station.

AVERAGE DISCHARGE.--34 years (water years 1911-15, 1920, 1952-79), 308 ft^3/s (8.723 m^3/s), 223,100 acre-ft/yr (275 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 3,150 ft^3/s (89.2 m^3/s) May 30, 1912; maximum gage height, 7.22 ft (2.201 m) Jan. 9, 1961 (backwater from ice); minimum daily discharge, 90 ft^3/s (2.55 m^3/s) Feb. 21, 1955.

EXTREMES FOR CURRENT YEAR.--Peaks above base of 1,000 ft^3/s (28 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
May 28	2200	*1,600	45.3	6.12	1.865	June 16	0100	1,270	36.0	5.84	1.780
June 7	0400	1,280	36.2	5.80	1.768						

Minimum daily discharge, 150 ft^3/s (4.25 m^3/s) Apr. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	167	177	170	175	170	160	155	452	1000	809	300	215
2	166	171	175	175	170	160	150	456	992	790	291	208
3	173	171	175	175	170	160	156	417	1020	729	281	201
4	165	168	175	175	170	160	155	384	1020	675	276	196
5	169	169	175	175	170	160	156	447	1070	623	275	193
6	168	168	175	175	170	160	161	536	1130	586	270	190
7	166	169	175	175	170	160	173	504	1190	553	257	185
8	169	171	175	175	170	160	173	442	1070	525	259	185
9	168	170	175	175	170	160	180	397	933	492	273	185
10	167	170	175	175	170	160	188	365	845	471	258	186
11	165	170	175	170	165	160	179	350	859	451	259	187
12	163	188	175	170	165	160	167	351	940	435	256	184
13	161	174	175	170	165	160	161	378	1020	416	254	182
14	165	170	175	170	165	160	167	472	1130	400	258	183
15	165	165	175	170	165	160	206	602	1150	388	280	182
16	164	159	175	170	165	160	239	692	1170	382	282	184
17	167	167	175	170	165	160	270	789	1110	377	278	183
18	166	169	175	170	165	160	301	1020	1030	369	285	187
19	163	168	175	170	165	160	301	1200	935	359	259	187
20	165	167	175	170	165	160	276	1210	829	354	302	190
21	170	162	175	170	165	155	283	1270	802	348	301	190
22	179	156	175	170	165	155	308	1290	817	346	270	190
23	171	155	175	170	165	155	369	1290	819	339	255	191
24	171	156	175	170	165	155	397	1350	825	346	257	190
25	176	158	175	170	165	155	371	1400	833	335	259	188
26	166	159	175	170	165	155	341	1400	824	325	246	195
27	172	159	175	170	165	155	360	1440	843	332	245	206
28	174	167	175	170	165	155	400	1460	843	328	239	192
29	172	169	175	170	---	155	388	1430	815	317	230	191
30	169	168	175	170	---	155	420	1250	797	317	231	190
31	172	---	175	170	---	155	---	1110	---	304	232	---
TOTAL	5214	5010	5420	5320	4670	4905	7551	26154	28641	13821	8298	5719
MEAN	168	167	175	172	167	158	252	844	955	446	268	191
MAX	179	188	175	175	170	160	420	1460	1190	809	302	215
MIN	161	155	170	170	165	155	150	350	797	304	230	182
AC-FT	10340	9940	10750	10550	9260	9730	14980	51880	56810	27410	16450	11340

CAL YR 1978 TOTAL 131532 MEAN 360 MAX 1470 MIN 116 AC-FT 260900
WTR YR 1979 TOTAL 120723 MEAN 331 MAX 1460 MIN 150 AC-FT 239500

NOTE.--NO GAGE-HEIGHT RECORD DEC. 2 TO APR. 2.

09303300 SOUTH FORK WHITE RIVER AT BUDGE'S RESORT, CO

LOCATION.--Lat 39°50'36", long 107°20'03", in NW¼ sec.36, T.2 S., R.89 W., Garfield County, Hydrologic Unit 14050005, on right bank 20 ft (6 m) upstream from Forest Service trail bridge, 0.2 mi (0.3 km) upstream from Wagonwheel Creek, and 0.3 mi (0.5 km) northeast of Budge's Resort.

DRAINAGE AREA.--52.3 mi² (135.5 km²), revised.

PERIOD OF RECORD.--June 1975 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 8,980 ft (2,737 m), from topographic map. June 1, 1975, to July 7, 1976, at site on left bank 50 ft (15 m) upstream at datum 1.3 ft (0.396 m) lower.

REMARKS.--Records poor. No diversion above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 1,500 ft³/s (42.5 m³/s) June 16, 1978; minimum daily, 21 ft³/s (0.59 m³/s) Sept. 29, 30, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, about 1,100 ft³/s (31.2 m³/s) June 16; minimum daily, 29 ft³/s (0.82 m³/s) Mar. 17-19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	51	52	50	44	40	35	34	58	220	420	73	58
2	50	52	50	44	40	34	36	59	250	390	71	57
3	50	51	48	44	40	34	40	57	300	360	70	56
4	49	51	48	44	40	34	42	57	340	330	69	56
5	49	51	47	44	40	34	36	64	380	318	59	55
6	49	50	47	43	40	33	38	67	400	282	69	54
7	49	50	47	43	39	33	38	67	400	265	68	54
8	49	50	47	43	39	33	39	64	340	235	73	54
9	48	50	47	43	39	33	40	60	320	208	74	54
10	48	51	47	43	38	33	41	59	310	182	70	55
11	47	51	46	43	38	32	40	56	310	167	68	55
12	47	52	46	43	38	32	39	56	340	154	67	54
13	47	50	46	43	38	31	40	58	500	143	68	54
14	46	51	46	43	38	31	41	64	660	132	67	53
15	48	54	45	43	38	30	43	71	760	123	68	53
16	52	58	45	42	37	30	46	81	760	116	72	53
17	52	62	45	42	37	29	48	91	660	110	70	52
18	53	61	45	42	36	29	50	104	560	112	71	52
19	52	59	45	42	36	29	50	122	460	104	73	52
20	52	58	45	42	36	30	48	141	370	109	71	52
21	53	55	44	42	36	30	48	155	360	99	70	52
22	54	52	44	42	36	31	51	173	380	96	66	52
23	53	51	44	42	36	31	54	195	430	93	64	52
24	53	52	44	41	36	30	55	208	450	89	63	52
25	54	50	44	41	36	30	53	232	460	86	62	52
26	54	50	44	41	35	31	52	235	470	74	61	53
27	52	50	44	41	35	32	55	235	480	83	61	55
28	52	50	44	41	35	32	57	230	470	74	60	53
29	52	50	44	41	---	33	54	215	450	77	59	52
30	52	50	44	41	---	33	55	205	430	76	60	52
31	52	---	44	40	---	33	---	210	---	73	60	---
TOTAL	1569	1574	1416	1313	1052	985	1363	3749	13020	5180	2087	1608
MEAN	50.6	52.5	45.7	42.4	37.6	31.8	45.4	121	434	167	67.3	53.6
MAX	54	62	50	44	40	35	57	235	760	420	74	58
MIN	46	50	44	40	35	29	34	56	220	73	59	52
AC-FT	3110	3120	2810	2600	2090	1950	2700	7440	25830	10270	4140	3190

CAL YR 1978 TOTAL 63251 MEAN 173 MAX 1490 MIN 41 AC-FT 125500
WTR YR 1979 TOTAL 34916 MEAN 95.7 MAX 760 MIN 29 AC-FT 69260

NOTE.--NO GAGE-HEIGHT RECORD MAY 27 TO JULY 4.

09303320 WAGONWHEEL CREEK AT BUDGE'S RESORT, CO

LOCATION.--Lat 39°50'40", long 107°20'10", in SW¼SW¼ sec.25, T.2 S., R.89 W., Garfield County, Hydrologic Unit 14050005, on right bank 60 ft (18 m) upstream from mouth and confluence of South Fork White River, about 800 ft (240 m) downstream from private road bridge, and 0.2 mi (0.3 km) north-northeast of Budge's Resort.

DRAINAGE AREA.--7.36 mi^2 (19.06 km^2), revised.

PERIOD OF RECORD.--June 1975 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 8,980 ft (2,737 m), from topographic map.

REMARKS.--Records poor. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 200 ft^3/s (5.66 m^3/s) June 15, 1979; maximum gage height, 4.10 ft (1.250 m) June 24, 1975; no flow many days in 1976-79.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 55 ft^3/s (1.6 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
June 15	unknown	a*200	5.66	unknown		June 25	2400	134	3.79	3.62	1.103

a About.

No flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.70	.05	.00	.00	.00	.00	.00	.00	40	82	2.8	.51
2	.60	.05	.00	.00	.00	.00	.00	.00	56	72	2.5	.49
3	.60	.05	.00	.00	.00	.00	.00	.00	70	60	2.4	.44
4	.50	.05	.00	.00	.00	.00	.00	.00	85	52	2.2	.42
5	.50	.05	.00	.00	.00	.00	.00	.00	92	47	2.2	.41
6	.40	.05	.00	.00	.00	.00	.00	.00	95	43	2.1	.39
7	.40	.05	.00	.00	.00	.00	.00	.00	85	38	2.0	.38
8	.30	.05	.00	.00	.00	.00	.00	.00	80	33	2.1	.36
9	.30	.05	.00	.00	.00	.00	.00	.00	75	32	2.3	.35
10	.20	.05	.00	.00	.00	.00	.00	.00	75	28	2.0	.33
11	.20	.05	.00	.00	.00	.00	.00	.00	80	25	1.9	.32
12	.10	.05	.00	.00	.00	.00	.00	.00	100	23	1.7	.29
13	.10	.05	.00	.00	.00	.00	.00	.00	140	20	1.7	.28
14	.10	.02	.00	.00	.00	.00	.00	.20	170	18	1.6	.25
15	.10	.00	.00	.00	.00	.00	.00	.50	180	18	1.6	.25
16	.10	.00	.00	.00	.00	.00	.00	1.5	160	16	1.6	.25
17	.10	.00	.00	.00	.00	.00	.00	1.8	140	13	1.5	.20
18	.10	.00	.00	.00	.00	.00	.00	2.2	120	13	1.4	.20
19	.10	.00	.00	.00	.00	.00	.00	2.7	90	12	1.4	.20
20	.10	.00	.00	.00	.00	.00	.00	4.4	66	11	1.3	.20
21	.10	.00	.00	.00	.00	.00	.00	6.3	65	9.6	1.3	.20
22	.10	.00	.00	.00	.00	.00	.00	9.0	44	8.4	1.3	.20
23	.10	.00	.00	.00	.00	.00	.00	10	102	7.6	1.1	.20
24	.10	.00	.00	.00	.00	.00	.00	16	105	6.7	.92	.20
25	.10	.00	.00	.00	.00	.00	.00	28	110	6.2	.83	.15
26	.10	.00	.00	.00	.00	.00	.00	37	114	5.6	.76	.15
27	.10	.00	.00	.00	.00	.00	.00	39	104	5.3	.67	.15
28	.10	.00	.00	.00	.00	.00	.00	40	90	4.4	.62	.15
29	.10	.00	.00	.00	---	.00	.00	36	80	4.0	.56	.15
30	.10	.00	.00	.00	---	.00	.00	33	82	3.5	.54	.15
31	.10	---	.00	.00	---	.00	---	31	---	3.1	.53	---
TOTAL	6.70	.67	.00	.00	.00	.00	.00	298.60	2895	720.4	47.43	8.22
MEAN	.22	.022	.000	.000	.000	.000	.000	9.63	96.5	23.2	1.53	.27
MAX	.70	.05	.00	.00	.00	.00	.00	40	180	82	2.8	.51
MIN	.10	.00	.00	.00	.00	.00	.00	.00	40	3.1	.53	.15
AC-FT	13	1.3	.00	.00	.00	.00	.00	592	5740	1430	94	16

CAL YR 1978 TOTAL 2781.00 MEAN 7.62 MAX 114 MIN .00 AC-FT 5520
WTR YR 1979 TOTAL 3977.02 MEAN 10.9 MAX 180 MIN .00 AC-FT 7890

NOTE.--NO GAGE-HEIGHT RECORD DEC. 7 TO APR. 5, May 25 to June 19.

09303400 SOUTH FORK WHITE RIVER NEAR BUDGE'S RESORT, CO

LOCATION.--Lat 39°51'51", long 107°32'00", in NW¼SE¼ sec.19, T.2 S., R.90 W., Rio Blanco County, Hydrologic Unit 14050005, on right bank on downstream side of Forest Service bridge, 300 ft (91 m) upstream from South Fork Campground, 10 mi (16.1 km) above mouth, and about 10.5 mi (17 km) southeast of Buford.

DRAINAGE AREA.--128 mi² (332 km²).

PERIOD OF RECORD.--May 1976 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 7,600 ft (2,316 m), from topographic map.

REMARKS.--Records good except those for period of no gage-height record, which are poor. No regulation or diversions above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,940 ft³/s (83.3 m³/s) June 14, 1978, gage height, 5.36 ft (1.634 m); minimum daily, 43 ft³/s (1.22 m³/s) Nov. 17-19, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 500 ft³/s (14 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
May 28	1700	1,850	52.4	4.85	1.478	June 16	0100	*2,680	75.9	5.24	1.597
June 7	1800	1,910	54.1	4.88	1.487	June 27	0300	1,610	45.6	4.73	1.442

Minimum daily discharge, 52 ft³/s (1.47 m³/s) Mar. 16-19.

REVISIONS.--The peak discharges and annual maximum (*) for water years 1976-78 and revised daily discharges, in cubic feet per second, for high-water period in water year 1978 are given below. These figures supersede those published in WDR CO-76-2, WDR CO-77-3, and WDR CO-78-3.

Water year	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Water year	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
1976	June 3	----	1,650	46.7	4.75	1.448	1978	May 23	2400	1,010	28.6	4.26	1.298
1977	May 9	2300	722	20.4	4.08	1.244		June 4	0300	1,350	38.2	4.59	1.399
	June 1	0100	*1,020	28.9	4.36	1.329		June 14	2100	*2,940	83.3	5.36	1.634

June 1, 1978	971	June 16, 1978	2,150	July 1, 1978	900	July 16, 1978	311
2	1,040	17	1,850	2	850	17	328
3	1,070	18	1,750	3	790	18	334
4	1,170	19	1,770	4	720	19	276
5	1,110	20	1,690	5	660	20	257
6	1,060	21	1,750	6	600	21	242
7	1,140	22	1,810	7	540	22	227
8	1,170	23	1,810	8	520	23	213
9	1,400	24	1,850	9	480	24	201
10	1,620	25	1,650	10	460	25	189
11	1,770	26	1,500	11	449	26	179
12	1,910	27	1,250	12	429	27	172
13	1,950	28	1,110	13	390	28	165
14	2,050	29	1,040	14	354	29	173
15	2,660	30	1,000	15	328	30	172
						31	159
TOTAL			46,071				12,068
MEAN			1,536				389
MAX			2,660				900
MIN			971				159
AC-FT			91,400				23,940

WATER YR 1978 TOTAL 95,076 MEAN 260 MAX 2,660 MIN 43 AC-FT 188,600

09303400 SOUTH FORK WHITE RIVER NEAR BUDGE'S RESORT, CO--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	86	81	84	76	68	64	61	146	961	1060	156	98
2	86	80	84	74	68	60	68	157	961	950	156	97
3	84	80	84	74	66	61	77	149	961	830	149	94
4	81	78	82	74	66	63	75	139	1020	702	146	93
5	81	79	82	74	66	61	62	149	1230	569	142	94
6	81	75	82	74	66	67	63	176	1350	606	142	92
7	81	75	80	74	66	60	68	184	1170	576	142	91
8	80	77	80	72	66	57	68	172	1260	523	146	93
9	80	75	80	72	66	63	73	153	970	474	156	92
10	80	76	78	72	66	79	77	143	840	441	142	97
11	79	76	78	72	66	76	76	132	860	412	132	100
12	79	84	78	72	66	69	73	126	1050	389	129	100
13	80	74	78	72	66	58	68	129	1370	365	132	96
14	80	74	78	70	65	57	70	146	1730	337	132	98
15	81	73	78	70	67	53	77	176	1830	320	135	96
16	80	75	78	70	66	52	82	238	1750	308	146	97
17	80	65	78	70	67	52	88	292	1510	291	135	95
18	84	65	78	70	64	52	96	394	1260	286	139	93
19	82	64	78	70	70	52	100	539	1020	274	142	95
20	81	64	78	70	86	54	108	659	850	253	142	96
21	83	64	78	68	81	54	112	774	840	249	138	97
22	89	64	78	68	71	56	120	914	990	237	126	98
23	84	64	78	68	69	54	123	1010	1100	226	118	96
24	85	66	78	68	69	54	139	914	1080	222	115	97
25	87	70	78	68	70	54	132	1050	1100	207	109	100
26	78	72	76	68	70	56	126	1070	1180	203	109	104
27	82	76	76	68	71	56	126	1240	1180	196	106	113
28	80	82	76	68	70	58	142	1350	1140	185	101	107
29	79	84	76	68	---	58	135	1290	1010	177	99	103
30	80	84	76	68	---	59	132	1290	1030	166	104	102
31	82	---	76	68	---	59	---	1070	---	163	101	---
TOTAL	2535	2216	2442	2190	1918	1828	2817	16371	34603	12297	4067	2924
MEAN	81.8	73.9	78.8	70.6	68.5	59.0	93.9	528	1153	397	131	97.5
MAX	89	84	84	76	86	79	142	1350	1830	1060	156	113
MIN	78	64	76	68	64	52	61	126	840	163	99	91
AC-FT	5030	4400	4840	4340	3800	3630	5590	32470	68640	24390	8070	5800

CAL YR 1978 TOTAL 97051 MEAN 266 MAX 2660 MIN 53 AC-FT 192500
WTR YR 1979 TOTAL 86208 MEAN 236 MAX 1830 MIN 52 AC-FT 171000

09303500 SOUTH FORK WHITE RIVER NEAR BUFORD, CO

LOCATION.--Lat 39°55'18", long 107°33'04", in NW¼SE¼ sec.36, T.1 S., R.91 W., Rio Blanco County, Hydrologic Unit 14050005, on left bank at upstream side of county bridge, 10 ft (3 m) downstream from Peltier Creek, and 5.6 mi (9.0 km) southeast of Buford.

DRAINAGE AREA.--152 mi² (394 km²), revised.

PERIOD OF RECORD.--August 1903 to October 1906, June 1910 to December 1915, October 1942 to September 1947, April 1967 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1057: 1944-45.

GAGE.--Water-stage recorder. Altitude of gage is 7,480 ft (2,280 m), from topographic map. July 26, 1903, to Oct. 31, 1906, nonrecording gage, and Oct. 1, 1942, to Sept. 30, 1947, water-stage recorder, at site 60 ft (18 m) upstream at different datums. Records for 1919-20 at site 6.0 mi (9.7 km) downstream not equivalent.

REMARKS.--Records good except those for winter period, which are fair. Diversions for irrigation of about 600 acres (2.43 km²) of hay meadows above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--25 years (water years 1904-6, 1911-15, 1943-47, 1968-79), 260 ft³/s (7.363 m³/s), 188,400 acre-ft (232 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 3,230 ft³/s (91.5 m³/s) June 17, 1906, gage height, 8.2 ft (2.50 m), site and datum then in use, from rating curve extended above 1,600 ft³/s (45 m³/s); minimum discharge recorded, 56 ft³/s (1.59 m³/s) Dec. 18, 1946, gage height, 1.01 ft (0.308 m), site and datum then in use, but may have been less during periods of no gage-height record.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,200 ft³/s (34 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
May 29	0700	1,510	42.8	5.84	1.780	June 16	1100	*2,030	57.5	6.54	1.993
June 7	0900	1,670	47.3	6.07	1.850	June 27	0700	1,460	41.3	5.80	1.768

Minimum daily discharge, 78 ft³/s (2.21 m³/s) Feb. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	115	101	110	98	78	84	98	201	1030	1060	155	126
2	115	101	105	96	80	84	100	202	958	967	154	122
3	113	101	112	94	82	85	102	202	1020	823	150	123
4	112	100	107	96	82	88	97	171	1100	713	158	127
5	110	99	128	94	84	90	97	201	1220	656	158	124
6	110	96	111	94	88	90	96	203	1370	604	158	124
7	110	95	99	94	90	88	102	204	1570	555	156	122
8	110	99	93	94	92	86	105	203	1410	523	156	123
9	110	96	101	94	92	84	108	202	1040	471	154	124
10	108	99	106	94	90	82	112	169	818	428	158	127
11	108	100	113	92	88	82	103	167	772	400	153	131
12	108	110	132	92	86	82	102	164	904	368	152	130
13	107	105	121	90	86	84	100	168	1230	339	154	128
14	106	100	121	90	84	84	101	201	1580	318	154	128
15	106	99	126	88	86	86	110	203	1900	294	155	128
16	106	104	131	88	88	86	125	243	1930	278	157	127
17	105	96	131	86	86	86	137	294	1790	264	157	127
18	106	100	131	86	84	86	147	348	1590	254	156	125
19	106	110	129	84	86	88	154	402	1240	239	157	126
20	105	110	126	84	88	88	146	504	892	232	157	127
21	106	112	126	82	90	88	145	572	829	225	157	129
22	111	111	126	82	88	90	154	632	974	219	154	128
23	107	105	124	80	86	90	167	708	1140	211	146	129
24	106	121	126	80	84	92	201	812	1200	207	143	127
25	108	108	123	82	84	94	167	946	1250	203	140	128
26	106	106	121	82	82	90	163	994	1280	203	139	130
27	105	95	116	80	82	90	162	1120	1330	203	136	138
28	102	115	110	80	82	92	168	1280	1230	202	130	136
29	101	117	106	80	---	94	165	1480	1090	201	125	134
30	102	111	104	80	---	95	165	1410	1050	201	125	133
31	102	---	102	80	---	96	---	1190	---	169	132	---
TOTAL	3332	3122	3617	2716	2398	2726	3899	15796	36707	12030	4676	3831
MEAN	107	104	117	87.6	85.6	87.9	130	510	1224	388	151	128
MAX	115	121	132	98	92	96	201	1480	1930	1060	155	138
MIN	101	95	93	80	78	82	96	164	772	169	125	122
AC-FT	6610	6190	7170	5390	4760	5410	7730	31330	72810	23860	9270	7600

CAL YR 1978 TOTAL 129924 MEAN 356 MAX 2870 MIN 89 AC-FT 257700
WTR YR 1979 TOTAL 94850 MEAN 260 MAX 1930 MIN 78 AC-FT 188100

NOTE.--NO GAGE-HEIGHT RECORD DEC. 5 TO APR. 3.

09304000 SOUTH FORK WHITE RIVER AT BUFORD, CO

LOCATION.--Lat 39°58'28", long 107°37'30", in NW¼NE¼ sec.17, T.1 S., R.91 W., Rio Blanco County, Hydrologic Unit 14050005, on left bank 300 ft (91 m) downstream from highway bridge, 0.8 mi (1.3 km) upstream from mouth, and 1.0 mi (1.6 km) south of Buford.

DRAINAGE AREA.--177 mi² (458 km²), revised.

PERIOD OF RECORD.--July 1919 to December 1920 (monthly discharge only, published in WSP 1313), October 1951 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,970 ft (2,124 m), from topographic map. Prior to Nov. 30, 1920, nonrecording gage at site 300 ft (91 m) upstream at different datum.

REMARKS.--Records good except those for periods of no gage-height record, which are poor. Diversions above station for irrigation of about 1,100 acres (4.45 km²) above station and a small area below.

AVERAGE DISCHARGE.--29 years, 254 ft³/s (7.193 m³/s), 184,000 acre-ft/yr (227 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,000 ft³/s (85 m³/s) June 16, 1978; maximum gage height, 7.07 ft (2.155 m) June 30, 1957; minimum daily discharge, 60 ft³/s (1.70 m³/s) Feb. 21, 1955.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,300 ft³/s (79 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
May 29	0900	1,750	49.6	6.04	1.841	June 15	0545	*2,390	67.7	6.64	2.024
June 7	1200	1,900	53.8	6.20	1.890	June 27	0700	1,560	44.2	5.93	1.807

Minimum daily discharge, 78 ft³/s (36.8 m³/s) Feb. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	103	104	118	104	78	84	98	204	1150	1160	190	163
2	103	103	108	100	80	84	100	222	1110	1080	180	158
3	100	103	98	98	82	86	106	217	1170	952	170	155
4	93	103	111	96	82	88	104	197	1260	808	160	156
5	98	103	122	94	84	90	100	198	1400	736	170	151
6	100	101	105	94	88	90	102	219	1570	676	175	144
7	100	101	93	94	90	88	110	233	1910	620	175	133
8	100	103	87	94	92	85	113	222	1610	575	175	131
9	100	102	95	94	92	84	115	203	1200	510	185	132
10	98	103	100	94	90	82	121	191	945	462	180	134
11	95	105	107	92	88	82	115	181	898	426	170	135
12	99	118	126	92	86	82	110	182	1110	390	160	131
13	100	108	115	90	86	84	106	185	1470	362	155	127
14	98	105	115	90	84	84	108	201	1910	340	155	126
15	98	97	120	88	86	86	120	219	2200	315	155	125
16	98	98	125	88	88	86	133	266	2170	300	180	123
17	99	91	125	86	86	86	151	322	1970	285	190	123
18	99	105	125	86	84	86	165	399	1740	276	190	120
19	99	102	123	84	86	88	171	467	1330	267	195	122
20	99	107	120	84	88	88	161	583	1000	249	200	123
21	103	109	120	82	90	88	161	654	938	243	220	124
22	106	111	120	82	88	90	169	736	1110	237	210	122
23	104	109	118	80	86	90	191	834	1260	228	200	121
24	103	105	120	80	84	92	218	970	1290	225	195	119
25	106	113	117	82	84	94	196	1130	1330	215	195	112
26	101	111	115	82	82	90	186	1170	1350	210	190	108
27	104	102	112	80	82	90	184	1310	1420	210	195	113
28	104	82	110	80	82	92	196	1480	1320	210	205	107
29	103	118	110	80	---	94	189	1720	1180	205	195	103
30	103	118	108	80	---	96	192	1620	1140	200	180	104
31	104	---	106	80	---	96	---	1380	---	195	170	---
TOTAL	3120	3140	3494	2730	2398	2726	4291	18115	41451	13167	5675	3846
MEAN	101	105	113	88.1	85.6	87.9	143	584	1382	425	183	128
MAX	106	118	126	104	92	96	218	1720	2200	1160	220	163
MIN	93	82	87	80	78	82	98	181	898	195	155	103
AC-FT	6190	6230	6930	5410	4760	5410	8510	35930	82240	26120	11260	7630

CAL YR 1978 TOTAL 120613 MEAN 330 MAX 2620 MIN 76 AC-FT 239200
WTR YR 1979 TOTAL 104163 MEAN 285 MAX 2200 MIN 78 AC-FT 206600

NOTE.--NO GAGE-HEIGHT RECORD DEC. 31 TO APR. 2; JULY 25 TO AUG. 31.

09304150 MILLER CREEK NEAR MEEKER, CO

LOCATION.--Lat 39°55'52", long 107°46'10", in NW¼NW¼ sec.31, T.1 S., R.92 W., Rio Blanco County, Hydrologic Unit 14050005, on left bank 200 ft (61 m) downstream from bridge, 1.1 mi (1.8 km) upstream from mouth, and 11 mi (18 km) southeast of Meeker.

DRAINAGE AREA.--57.6 mi^2 (149.2 km^2).

PERIOD OF RECORD.--October 1970 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,710 ft (2,045 m), from topographic map.

REMARKS.--Records good except those for winter period, which are fair. One small diversion above station for irrigation below. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--9 years, 18.4 ft^3/s (0.521 m^3/s), 13,330 acre-ft/yr (16.4 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 200 ft^3/s (5.66 m^3/s) May 20, 1973, gage height, 3.95 ft (1.204 m), from rating curve extended above 69 ft^3/s (2.0 m^3/s); minimum daily, 4.6 ft^3/s (0.13 m^3/s) June 11, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 204 ft^3/s (5.78 m^3/s) at 2200 May 28, gage height, 4.37 ft (1.241 m), only peak above base of 60 ft^3/s (1.7 m^3/s); minimum daily, 11 ft^3/s (0.312 m^3/s) Feb. 11, 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	15	16	14	22	12	12	12	91	16	15	16
2	17	15	16	13	22	12	12	12	80	16	15	16
3	17	15	16	13	22	12	12	13	74	15	14	16
4	16	15	15	14	22	13	12	13	70	17	13	16
5	17	15	15	15	22	12	12	12	65	17	13	15
6	16	15	15	15	22	12	12	12	64	18	14	15
7	16	15	15	15	21	12	13	13	65	16	13	15
8	16	15	14	14	20	12	13	14	63	17	14	16
9	16	15	15	15	19	12	13	14	57	17	14	16
10	15	15	14	15	14	12	13	14	49	17	14	16
11	15	15	16	15	12	12	14	14	44	15	14	16
12	15	17	12	15	11	12	13	14	40	17	15	16
13	15	15	14	15	11	12	12	14	34	16	15	16
14	16	15	16	16	12	12	13	14	33	16	15	15
15	17	15	15	15	13	12	13	14	31	16	15	14
16	16	15	16	14	12	12	13	14	28	17	16	15
17	16	15	14	14	12	12	13	14	24	16	18	15
18	16	15	15	13	14	12	13	15	24	15	18	15
19	16	15	15	13	14	12	13	15	25	16	18	15
20	16	15	15	13	13	12	13	20	23	15	18	15
21	16	15	15	14	13	12	13	29	21	14	17	15
22	17	15	15	13	13	12	12	35	21	15	16	14
23	16	16	15	15	13	12	12	66	19	15	16	14
24	16	15	16	16	12	12	12	84	20	15	15	14
25	16	15	15	13	14	12	12	106	18	14	15	17
26	16	15	14	13	13	12	12	124	17	12	15	23
27	16	15	13	14	13	12	12	151	18	12	15	23
28	15	15	15	16	12	13	12	161	18	14	14	22
29	15	16	15	17	---	13	12	163	16	15	15	21
30	16	16	15	20	---	12	12	136	15	15	16	21
31	15	---	15	22	---	12	---	109	---	15	16	---
TOTAL	495	455	462	459	433	375	375	1441	1167	483	471	493
MEAN	16.0	15.2	14.9	14.8	15.5	12.1	12.5	46.5	38.9	15.6	15.2	16.4
MAX	17	17	16	22	22	13	14	163	91	18	18	23
MIN	15	15	12	13	11	12	12	12	15	12	13	14
AC-FT	982	902	916	910	859	744	744	2860	2310	958	934	978

CAL YR 1978 TOTAL 5958 MEAN 16.3 MAX 96 MIN 10 AC-FT 11820
WTR YR 1979 TOTAL 7109 MEAN 19.5 MAX 163 MIN 11 AC-FT 14100

09304200 WHITE RIVER ABOVE COAL CREEK, NEAR MEEKER, CO

LOCATION.--Lat 40°00'18", long 107°49'29", in NW¼NW¼ sec.3, T.1 S., R.93 W., Rio Blanco County, Hydrologic Unit 14050005, on left bank 40 ft (12 m) downstream from county road bridge, 2.3 mi (3.7 km) upstream from Coal Creek, and 5.0 mi (8.0 km) southeast of Meeker.

DRAINAGE AREA.--648 mi^2 (1,678 km^2), revised.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1961 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,400 ft (1,951 m), from topographic map. Oct. 1, 1961, to Sept. 30, 1976, at site 76 ft (23 m) upstream at datum 2.0 ft (0.610 m) higher.

REMARKS.--Records good except those for winter period and period of no gage-height record, which are poor. Diversions above station for irrigation of about 8,000 acres (32.4 km^2) above station and about 4,000 acres (16.2 km^2) below.

AVERAGE DISCHARGE.--18 years, 546 ft^3/s (15.46 m^3/s), 395,600 acre-ft/yr (488 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,900 ft^3/s (139 m^3/s) May 29, 1979, gage height, 5.97 ft (1.820 m); minimum daily discharge, 6.5 ft^3/s (0.18 m^3/s) July 19-21, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,000 ft^3/s (57 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
May 29	0300	*4,900	139	5.97	1.820	June 16	0900	3,860	109	5.78	1.762
June 8	0100	3,340	94.6	5.23	1.594	June 27	0800	2,340	66.3	4.82	1.469

Minimum daily discharge, 135 ft^3/s (3.82 m^3/s) Sept. 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	287	361	330	320	260	250	260	719	2780	1790	342	290
2	287	346	320	320	250	250	250	786	2510	1760	332	278
3	278	345	310	330	250	250	285	764	2560	1670	306	272
4	280	341	300	340	250	260	308	669	2580	1360	293	269
5	286	341	280	350	250	270	301	707	2610	1220	320	248
6	312	333	270	360	250	260	287	858	2720	1120	326	239
7	308	324	260	360	260	260	228	892	2960	1040	318	227
8	308	340	250	350	260	250	175	814	3150	976	318	227
9	304	327	240	350	260	250	211	719	2530	904	336	224
10	296	316	230	360	250	240	358	661	1940	823	330	224
11	303	319	220	350	240	240	222	620	1740	758	310	230
12	299	363	230	350	240	240	256	607	1940	723	278	224
13	303	331	230	350	240	240	248	623	2420	662	284	212
14	303	318	230	350	250	240	245	715	3030	613	290	212
15	302	298	240	350	250	250	316	901	3480	576	322	209
16	302	294	250	340	240	250	413	1070	3420	564	342	209
17	306	284	250	330	250	250	424	1200	3250	552	342	191
18	310	305	250	330	240	250	521	1500	2950	511	346	155
19	301	301	250	320	240	250	552	1860	2400	494	354	145
20	305	305	260	320	250	250	483	2120	1720	457	380	150
21	329	312	270	310	250	250	480	2530	1550	445	415	148
22	369	320	270	310	250	250	526	2440	1660	438	370	142
23	356	316	280	300	250	260	602	2560	1780	411	358	140
24	356	308	280	300	240	260	672	2840	1850	424	358	138
25	364	328	290	300	240	260	643	3320	1890	398	342	135
26	347	323	300	290	240	260	586	3420	1990	371	358	140
27	367	303	300	280	240	260	587	3640	2100	384	380	158
28	371	273	300	270	240	250	643	4100	2000	392	342	152
29	363	327	310	260	---	250	620	4520	1820	375	330	165
30	358	330	320	260	---	260	658	3860	1770	364	322	162
31	358	---	320	260	---	260	---	3240	---	355	326	---
TOTAL	9918	9632	8440	9970	6930	7820	12360	55275	71100	22930	10372	5915
MEAN	320	321	272	322	248	252	412	1783	2370	740	335	197
MAX	371	363	330	360	260	270	672	4520	3480	1790	415	290
MIN	278	273	220	260	240	240	175	607	1550	355	278	135
AC-FT	19670	19110	16740	19780	13750	15510	24520	109600	141000	45480	20570	11730

CAL YR 1978 TOTAL 232287 MEAN 636 MAX 3530 MIN 120 AC-FT 460700
WTR YR 1979 TOTAL 230662 MEAN 632 MAX 4520 MIN 135 AC-FT 457500

NOTE.--NO GAGE-HEIGHT RECORD DEC 1 TO APR. 2.

09304200 WHITE RIVER ABOVE COAL CREEK, NEAR MEEKER, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--July 1978 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: July 1978 to current year.
WATER TEMPERATURES: July 1978 to current year.

INSTRUMENTATION.--Water-quality monitor since July 1978.

REMARKS.--Daily maximum and minimum specific-conductance data available in district office.

COOPERATION.--Chemical quality data are furnished by Water and Power Resources Service.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 439 micromhos Dec. 27, 1978; minimum, 243 micromhos May 2, 1979.
WATER TEMPERATURES: Maximum, 20.5°C Sept. 6, 1977; minimum, 0.0°C many days during winter months.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 439 micromhos Dec. 27; minimum, 243 micromhos May 2.
WATER TEMPERATURES: Maximum, 17.5°C Aug. 11; minimum, 0.0°C many days during December to March.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)
JUL								
14...	1235	604	280	8.3	14.0	41	8.4	3.5
20...	1000	556	310	8.2	13.5	45	9.2	3.7
27...	1000	450	334	8.5	13.5	50	9.4	3.7
AUG								
10...	1300	280	361	8.7	16.5	53	11	4.1
21...	1300	264	377	8.5	15.5	59	11	4.1
28...	0900	210	383	8.1	11.0	57	11	4.4
SEP								
05...	1100	132	377	8.4	15.0	59	11	5.1
11...	0910	163	404	8.2	12.0	59	11	4.8
21...	1100	272	408	8.4	6.0	62	11	4.4
25...	1300	274	425	8.5	12.0	63	11	3.9

DATE	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)
JUL								
14...	1.0	111	5	46	1.4	173	.24	282
20...	1.0	126	0	54	2.1	196	.27	294
27...	1.0	128	3	60	1.1	223	.30	271
AUG								
10...	1.0	118	10	67	1.8	241	.33	182
21...	1.0	116	13	79	.0	272	.37	194
28...	1.0	143	0	80	2.5	261	.35	148
SEP								
05...	1.0	137	5	79	2.1	264	.36	94.1
11...	1.0	145	0	78	2.8	263	.36	116
21...	1.0	139	2	87	2.1	275	.37	202
25...	1.0	120	11	91	.7	281	.38	208

09304200 WHITE RIVER ABOVE COAL CREEK, NEAR MEEKER, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
OCT								
02...	1300	284	438	8.6	11.5	60	11	3.9
11...	1330	287	394	8.6	10.0	59	11	4.1
17...	1100	306	410	8.3	7.0	60	11	4.1
24...	1330	354	399	8.5	6.0	57	11	3.7
NOV								
03...	1100	342	394	8.4	6.0	57	11	3.5
08...	1500	343	376	8.7	6.0	56	11	3.7
13...	1530	302	386	8.6	3.5	57	10	3.5
20...	1020	272	396	8.4	.0	57	11	3.7
28...	1430	218	424	8.4	.5	64	12	4.1
DEC								
04...	1400	300	404	8.4	.0	59	11	3.5
12...	1400	230	431	8.2	.5	62	11	3.7
18...	1500	250	377	8.2	.5	55	10	3.7
28...	0845	300	391	8.2	.0	58	11	3.5
JAN								
05...	1400	350	369	8.3	.5	56	9.7	3.2
08...	1430	350	428	8.3	.0	65	12	4.1
16...	1400	340	383	8.3	.5	57	10	3.0
22...	1400	310	398	8.3	1.0	58	11	3.0
29...	1445	260	369	8.2	.5	53	10	3.2
FEB								
05...	1430	249	420	8.3	.5	64	12	3.7
12...	1330	240	382	8.3	.5	59	11	3.7
21...	1400	250	401	8.2	.0	60	11	3.9
28...	1300	260	391	8.2	.5	59	11	3.0
MAR								
07...	1300	240	386	8.2	1.0	59	11	3.0
13...	1400	240	401	8.4	3.0	59	10	3.7
21...	1500	250	383	8.3	4.5	59	11	3.2
26...	1100	260	392	8.4	5.5	61	11	3.9
APR								
02...	1330	256	401	8.4	5.5	61	11	3.9
10...	1400	338	374	8.4	--	56	11	3.5
16...	0830	435	382	8.2	5.5	59	10	3.7
24...	0833	692	341	8.2	7.0	49	9.2	3.0
MAY								
02...	1040	820	319	8.2	7.0	47	8.8	3.0
08...	1542	860	316	8.5	5.0	47	8.8	3.0
14...	0855	728	339	8.2	7.0	51	9.5	2.8
24...	1330	2595	221	8.3	11.0	34	5.8	2.1
31...	1033	3300	215	8.2	5.5	32	6.2	1.8
JUN								
07...	1005	3340	206	8.2	7.0	30	6.0	1.4
16...	1355	3450	196	8.2	10.0	28	6.0	1.8
22...	1045	1780	219	8.4	8.0	30	6.4	2.1
29...	1440	1740	212	8.2	12.0	30	6.2	1.8
JUL								
13...	1300	632	292	8.3	15.5	43	8.6	3.2
19...	1525	495	324	8.4	17.0	47	9.1	3.7
AUG								
02...	1450	338	362	8.4	18.0	55	11	4.4
10...	1010	330	374	8.2	15.0	54	11	3.9
17...	1310	334	384	8.3	13.0	55	11	4.4
24...	1000	362	376	8.3	12.5	56	11	3.9
SEP								
13...	1455	209	385	8.5	12.0	58	11	3.9
21...	1339	145	388	8.7	13.0	59	11	4.1

09304200 WHITE RIVER ABOVE COAL CREEK, NEAR MEEKER, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)
OCT								
02...	1.0	129	7	87	3.6	264	.35	195
11...	1.0	128	5	86	.7	266	.36	206
17...	1.0	128	4	96	1.8	275	.37	227
24...	1.0	110	14	84	.7	257	.35	246
NOV								
03...	1.0	126	3	82	1.4	254	.35	235
08...	1.0	101	16	83	1.4	248	.34	230
13...	1.0	109	9	85	.4	249	.34	203
20...	1.0	126	4	83	1.4	259	.35	190
28...	1.0	126	7	100	3.6	271	.37	160
DEC								
04...	1.0	131	0	89	2.1	251	.34	203
12...	1.0	139	0	92	2.1	273	.37	170
18...	1.0	126	0	80	.7	235	.32	159
28...	1.0	132	0	86	2.1	236	.32	191
JAN								
05...	1.0	123	1	84	.7	237	.32	224
08...	1.0	142	1	99	2.1	296	.40	280
16...	1.0	117	5	81	1.4	267	.36	245
22...	1.0	127	1	86	1.1	259	.35	217
29...	1.0	107	0	89	1.8	256	.35	180
FEB								
05...	1.0	120	10	99	2.1	318	.43	214
12...	1.0	125	1	91	1.8	240	.33	156
21...	1.0	128	0	91	2.8	263	.36	178
28...	1.0	131	0	92	2.1	266	.36	187
MAR								
07...	1.0	126	0	89	3.6	255	.35	165
13...	1.0	118	5	95	3.2	255	.35	165
21...	1.0	118	8	89	2.8	258	.35	174
26...	1.0	127	3	95	5.0	264	.36	185
APR								
02...	1.0	117	8	90	.0	268	.36	185
10...	1.0	112	5	85	.0	252	.34	230
16...	1.0	126	0	90	.4	254	.35	298
24...	1.0	123	0	64	1.8	228	.31	426
MAY								
02...	1.0	122	0	59	1.1	214	.29	474
08...	1.0	107	6	55	1.4	215	.29	499
14...	1.0	132	0	63	.7	203	.28	399
24...	1.0	103	0	26	.0	140	.19	981
31...	1.0	107	0	22	.7	134	.18	1190
JUN								
07...	1.0	100	0	20	.0	120	.16	1080
16...	1.0	96	0	21	.4	110	.15	1030
22...	1.0	95	2	26	.4	120	.16	577
29...	1.0	94	0	27	1.4	127	.17	597
JUL								
13...	1.0	118	1	47	1.1	190	.26	324
19...	1.0	125	3	54	.0	209	.28	279
AUG								
02...	2.0	134	5	66	2.1	254	.35	232
10...	2.0	143	0	70	.7	263	.36	234
17...	1.0	139	1	73	1.4	242	.33	218
24...	1.0	136	2	76	1.1	251	.34	245
SEP								
13...	1.0	128	5	84	.0	255	.35	144
21...	1.0	115	13	80	2.8	257	.35	101

09304200 WHITE RIVER ABOVE COAL CREEK, NEAR MEEKER, CO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	383	399	---	---	383	377	---	248			---	370
2	383	400	---	---	374	379	---	272			---	373
3	382	402	---	---	380	384	---	297			---	374
4	385	402	---	---	381	403	---	325			---	376
5	383	402	---	---	390	393	---	330			---	379
6	382	403	---	---	374	380	---	307			---	389
7	381	404	---	---	366	388	---	299			---	392
8	380	403	---	---	365	389	---	306			---	392
9	381	402	---	---	374	394	---	326			---	391
10	381	406	---	---	377	406	---	337			---	389
11	383	405	---	---	366	399	---	345			377	389
12	380	377	---	---	369	---	---	348			374	388
13	380	379	---	---	363	---	---	346			371	388
14	380	385	---	---	363	---	---	340			370	390
15	381	392	---	---	369	---	---	---			373	390
16	382	395	---	---	375	---	360	---			382	390
17	381	399	---	---	373	---	347	---			375	393
18	383	386	371	---	394	---	338	---			371	395
19	388	390	372	---	388	---	350	---			---	396
20	393	385	388	---	367	---	355	---			---	397
21	396	---	399	---	381	---	325	---			---	397
22	397	---	389	---	371	---	340	---			---	397
23	402	---	389	---	381	---	313	---			---	396
24	408	---	391	---	375	---	327	---			---	392
25	394	---	456	---	388	---	307	---			373	396
26	408	---	418	---	376	---	310	---			369	402
27	409	---	413	---	369	---	277	---			369	402
28	406	---	---	---	374	---	263	---			370	409
29	402	---	---	389	---	---	256	---			372	410
30	404	---	---	400	---	---	251	---			371	---
31	402	---	---	410	---	---	---	---			368	---

09304200 WHITE RIVER ABOVE COAL CREEK, NEAR MEEKER, CO--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	12.5	7.5	7.0	4.0	---	---	---	---	.5	.0	3.5	1.0
2	13.0	8.0	7.5	4.0	---	---	---	---	.5	.5	5.0	1.5
3	10.5	6.0	8.0	5.0	---	---	---	---	.5	.5	5.0	1.0
4	10.5	5.5	6.5	3.5	---	---	---	---	.5	.5	2.5	.5
5	10.5	6.0	7.0	4.0	---	---	---	---	.5	.5	2.5	.5
6	10.5	5.5	5.5	2.0	---	---	---	---	1.0	.5	5.5	1.5
7	11.0	6.0	5.0	1.0	---	---	---	---	1.0	.5	8.5	3.0
8	11.0	6.5	6.0	2.5	---	---	---	---	1.0	.5	7.0	4.0
9	12.0	7.0	6.5	4.5	---	---	---	---	1.0	.5	5.0	.5
10	11.5	7.0	5.5	3.0	---	---	---	---	.5	.5	4.5	.5
11	11.5	7.0	5.0	2.0	---	---	---	---	1.0	.5	5.5	.0
12	11.5	7.0	5.0	2.0	---	---	---	---	3.0	.5	---	---
13	9.5	6.5	4.0	.5	---	---	---	---	5.0	1.0	---	---
14	9.0	4.5	3.5	1.0	---	---	---	---	3.5	1.5	---	---
15	9.5	5.5	3.0	1.5	---	---	---	---	4.0	.5	---	---
16	9.5	5.5	3.5	1.0	---	---	---	---	4.5	.5	---	---
17	8.0	6.0	1.5	.5	---	---	---	---	4.5	.5	---	---
18	9.0	7.0	2.0	.5	1.0	.5	---	---	3.0	.5	---	---
19	9.5	6.0	3.0	.5	1.5	1.0	---	---	2.5	.5	---	---
20	8.5	6.0	1.0	.5	1.5	1.0	---	---	3.5	.5	---	---
21	8.5	7.0	---	---	1.5	.0	---	---	3.0	.5	---	---
22	8.0	6.5	---	---	1.5	.0	---	---	1.5	.5	---	---
23	8.0	4.5	---	---	1.0	.0	---	---	3.5	.5	---	---
24	7.0	5.0	---	---	1.5	.0	---	---	4.0	.5	---	---
25	7.0	4.5	---	---	1.0	.0	---	---	3.0	.5	---	---
26	6.0	2.0	---	---	1.0	.0	---	---	3.5	.5	---	---
27	6.5	2.5	---	---	1.0	.0	---	---	4.0	1.5	---	---
28	7.0	3.0	---	---	---	---	---	---	4.5	.5	---	---
29	7.0	3.0	---	---	---	---	.5	.5	---	---	---	---
30	6.0	4.0	---	---	---	---	.5	.0	---	---	---	---
31	7.5	3.5	---	---	---	---	---	---	---	---	---	---

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	9.5	7.0					---	---	16.5	8.5
2	---	---	8.0	5.5					---	---	16.0	9.0
3	---	---	7.0	4.0					---	---	17.0	9.0
4	---	---	8.5	4.5					---	---	17.0	9.5
5	---	---	12.0	6.5					---	---	17.0	9.0
6	---	---	9.0	6.0					---	---	17.0	9.0
7	---	---	6.0	3.0					---	---	17.0	6.5
8	---	---	4.0	2.0					---	---	15.5	9.5
9	---	---	7.5	4.0					---	---	15.0	10.0
10	---	---	8.0	4.0					---	---	15.5	11.5
11	---	---	9.0	5.0					17.5	15.0	15.0	9.5
12	---	---	10.0	6.0					14.5	12.0	14.5	8.5
13	---	---	13.0	6.0					14.0	11.0	11.0	7.0
14	---	---	9.5	7.0					14.5	11.5	12.5	6.0
15	---	---	---	---					14.5	10.0	13.0	6.0
16	12.5	5.5	---	---					13.0	10.5	14.0	6.5
17	11.5	5.5	---	---					12.0	10.5	14.0	7.0
18	10.5	5.5	---	---					11.0	9.5	15.0	8.0
19	9.5	6.0	---	---					---	---	12.5	7.5
20	10.0	4.0	---	---					---	---	14.0	8.0
21	10.0	5.0	---	---					---	---	14.0	7.5
22	11.5	5.5	---	---					---	---	13.0	7.5
23	12.0	6.5	---	---					---	---	14.0	7.5
24	13.5	7.0	---	---					---	---	13.5	8.0
25	10.0	6.0	---	---					16.0	10.5	13.0	8.5
26	9.0	5.5	---	---					16.5	10.0	13.0	8.5
27	12.0	5.0	---	---					16.0	10.0	14.0	8.5
28	10.0	8.0	---	---					16.5	10.5	13.0	7.5
29	10.5	5.0	---	---					17.0	7.0	12.5	7.5
30	10.0	6.0	---	---					13.0	10.0	---	---
31	---	---	---	---					16.0	9.0	---	---

09304480 COAL CREEK BELOW LITTLE BEAVER CREEK NEAR MEEKER, CO

LOCATION.--Lat 40°01'52", long 107°49'18", in NE¼NE¼ sec.28, T.1 N., R.93 W., Rio Blanco County, Hydrologic Unit 14050005, 1.7 mi (2.7 km) upstream from mouth, 0.1 mi (0.2 km) downstream from Little Beaver Creek, and 4.6 mi (7.4 km) east of Meeker.

PERIOD OF RECORD.--July 1978 to current year.

COOPERATION.--Chemical quality data are furnished by Water and Power Resources Service.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
JUL								
06...	1350	31	603	8.2	15.0	75	29	15
14...	1315	35	632	8.0	19.0	83	29	15
20...	1400	30	611	7.9	20.0	82	27	13
27...	1345	24	680	8.1	21.0	94	28	13
AUG								
08...	1100	33	772	8.2	16.0	100	36	18
15...	1300	32	747	8.3	14.0	100	35	18
21...	1340	20	697	8.3	16.5	94	29	14
28...	1000	25	661	8.1	11.5	90	29	13
SEP								
07...	1430	25	611	8.2	18.0	84	27	11
11...	1000	29	635	8.3	12.5	87	26	11
25...	1415	18	673	8.2	13.5	87	28	13

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)
JUL								
06...	2.0	220	0	158	2.8	415	.56	35.0
14...	2.0	242	0	160	3.5	433	.59	41.7
20...	2.0	223	0	147	5.3	420	.57	34.0
27...	2.0	234	0	192	3.5	489	.67	32.7
AUG								
08...	2.0	229	0	228	5.7	558	.76	50.6
15...	3.0	215	3	228	8.5	550	.75	48.3
21...	2.0	211	4	191	3.5	500	.68	27.9
28...	2.0	269	0	192	5.3	481	.65	32.7
SEP								
07...	2.0	217	0	157	21	449	.61	30.3
11...	3.0	206	2	162	4.6	449	.61	35.2
25...	2.0	178	0	189	5.7	471	.64	23.5

09304480 COAL CREEK BELOW LITTLE BEAVER CREEK NEAR MEEKER, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
OCT								
02...	1400	27	639	8.3	11.0	87	25	11
11...	1415	6.0	830	8.3	13.0	99	38	21
17...	1400	1.5	954	8.1	8.5	115	46	25
24...	1430	3.0	1040	8.1	7.0	119	56	31
NOV								
03...	1400	13	700	8.2	9.0	86	33	18
08...	1430	13	713	8.3	5.0	89	33	17
13...	1430	16	914	8.2	2.0	99	47	29
20...	1140	11	831	8.1	1.0	95	43	25
28...	1500	2.0	910	8.1	.5	109	47	26
DEC								
08...	1330	3.0	1340	8.2	.0	141	75	49
12...	1445	4.0	1240	8.1	.5	136	73	47
21...	1445	5.7	1270	8.1	1.0	139	77	52
28...	1000	5.4	1160	8.0	.0	121	68	43
JAN								
05...	1430	4.0	1230	8.2	.0	128	71	47
09...	1000	4.0	1310	8.2	.0	134	76	49
16...	1615	4.0	1270	8.2	.5	128	73	47
22...	1500	4.0	1360	8.1	1.0	136	82	55
29...	1430	4.0	1120	7.9	.5	111	67	44
FEB								
05...	1600	4.0	1300	8.0	.5	136	77	50
12...	1430	4.0	1300	8.1	.5	125	77	52
21...	1500	4.0	1370	8.1	.0	138	81	57
28...	1400	4.0	1410	7.9	.5	141	82	54
MAR								
07...	1400	4.5	1430	8.3	1.0	140	85	64
13...	1300	4.5	1440	8.2	5.0	152	88	64
21...	1400	4.0	1770	8.2	7.0	166	100	94
26...	1300	11	1700	8.0	6.0	159	101	90
APR								
02...	1500	5.0	1870	8.2	6.0	182	113	102
10...	1430	16	1460	8.2	7.0	153	82	67
16...	1045	64	1240	7.9	6.5	121	64	62
24...	1030	74	865	7.9	9.0	79	37	34
MAY								
08...	1430	53	1110	8.1	6.5	99	60	57
14...	1015	51	900	7.8	9.5	85	44	40
24...	1300	72	572	8.0	13.5	60	26	20
31...	0910	81	703	7.9	9.0	70	34	27
JUN								
07...	1200	47	769	7.8	9.0	82	37	26
16...	1045	24	676	8.1	10.5	74	34	19
22...	1350	12	1140	8.1	20.0	123	63	42
29...	1300	46	621	8.3	17.5	74	29	16
JUL								
13...	1055	22	663	8.0	15.0	87	31	15
19...	1330	61	671	8.2	18.0	83	30	15
AUG								
02...	0905	24	646	8.0	13.5	83	29	16
10...	0955	15	712	8.1	16.0	67	30	20
17...	1335	17	886	8.0	14.0	93	42	34
24...	1025	14	717	8.2	14.0	90	33	19
30...	1500	15	727	8.2	16.0	90	34	19
SEP								
13...	1500	14	694	8.3	12.0	85	32	16
21...	0925	6.0	899	8.2	10.0	100	45	28

09304480 COAL CREEK BELOW LITTLE BEAVER CREEK NEAR MEEKER, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)
OCT								
02...	2.0	180	7	171	5.7	426	.58	31.1
11...	2.0	239	0	240	6.4	580	.79	9.40
17...	2.0	269	0	296	11	701	.95	2.84
24...	2.0	303	0	333	13	762	1.04	6.17
NOV								
03...	2.0	211	0	200	7.4	503	.68	17.7
08...	2.0	200	5	199	7.0	487	.66	17.1
13...	4.0	225	0	288	14	646	.88	28.8
20...	2.0	240	0	239	11	593	.81	18.4
28...	2.0	291	0	270	11	659	.90	3.56
DEC								
08...	3.0	372	0	424	20	987	1.34	7.99
12...	2.0	365	0	402	20	921	1.25	9.95
21...	3.0	367	0	434	21	963	1.31	14.8
28...	3.0	347	0	360	17	862	1.17	12.8
JAN								
05...	2.0	356	0	398	18	886	1.20	9.57
09...	2.0	376	0	420	21	946	1.29	10.2
16...	3.0	354	0	396	21	929	1.26	10.0
22...	3.0	382	0	446	23	1030	1.40	11.1
29...	2.0	262	0	410	17	847	1.15	9.15
FEB								
05...	3.0	366	0	434	20	971	1.32	10.5
12...	3.0	330	0	440	25	947	1.29	10.2
21...	4.0	359	0	460	24	1040	1.41	11.2
28...	7.0	369	0	465	25	1040	1.41	11.2
MAR								
07...	4.0	355	7	500	28	1090	1.48	13.2
13...	4.0	356	0	544	29	1100	1.50	13.4
21...	7.0	381	0	720	30	1430	1.94	15.4
26...	6.0	320	0	684	30	1330	1.81	41.3
APR								
02...	6.0	353	0	777	3.6	1510	2.05	20.4
10...	6.0	354	0	570	24	1150	1.56	51.2
16...	7.0	227	0	467	22	937	1.27	162
24...	5.0	192	0	246	15	566	.77	113
MAY								
08...	5.0	222	0	398	23	827	1.12	120
14...	4.0	204	0	284	17	626	.85	86.4
24...	3.0	178	0	144	8.9	377	.51	73.3
31...	3.0	197	0	202	10	473	.64	103
JUN								
07...	4.0	206	0	230	10	527	.72	68.2
16...	2.0	2	0	176	5.3	442	.60	29.6
22...	3.0	323	0	360	14	825	1.12	28.3
29...	2.0	176	16	160	6.0	413	.56	51.3
JUL								
13...	2.0	233	0	170	2.8	466	.63	27.7
19...	2.0	236	0	155	4.6	455	.62	75.3
AUG								
02...	3.0	218	0	178	7.1	472	.64	30.6
10...	2.0	234	0	192	6.7	511	.69	20.7
17...	4.0	210	0	296	13	623	.85	28.6
24...	2.0	214	0	202	7.1	515	.70	20.7
30...	2.0	214	0	216	7.1	527	.72	22.1
SEP								
13...	2.0	184	8	204	7.1	485	.66	18.4
21...	3.0	250	0	280	11	634	.86	10.3

09304500 WHITE RIVER NEAR MEEKER, CO

LOCATION.--Lat 40°02'01", long 107°51'42", in NE¼ sec.30, T.1 N., R.93 W., Rio Blanco County, Hydrologic Unit 14050005, on left bank 1.0 mi (1.6 km) upstream from Curtis Creek and 2.5 mi (4.0 km) east of Meeker.

DRAINAGE AREA.--755 mi^2 (1,955 km^2), revised.

PERIOD OF RECORD.--June 1901 to December 1906, October 1909 to current year. Monthly discharge only for some periods, published in WSP 1313. Published as "at Meeker" 1901-13.

REVISED RECORDS.--WSP 764: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 6,300 ft (1,920 m), from topographic map. Prior to Oct. 31, 1906, and May 7 to Aug. 13, 1910, nonrecording gage, and Aug. 14, 1910, to Oct. 19, 1913, water-stage recorder, at site 2.5 mi (4.0 km) downstream at different datum. Oct. 20, 1913, to Sept. 30, 1971, water-stage recorder at present site, at datum 3.00 ft (0.914 m) higher prior to Oct. 1, 1933, and at datum 2.00 ft (0.610 m) higher thereafter.

REMARKS.--Records good except those for period of no gage-height record, which are poor. Diversions above station for irrigation of about 12,000 acres (48.6 km^2) above station and about 3,000 acres (12.1 km^2) below. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--75 years, 620 ft^3/s (17.56 m^3/s), 449,200 acre-ft/yr (554 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 6,370 ft^3/s (180 m^3/s) June 16, 1921, gage height, 7.60 ft (2.316 m), present datum, from rating curve extended above 4,700 ft^3/s (130 m^3/s); minimum daily, 78 ft^3/s (2.21 m^3/s) July 16, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,100 ft^3/s (59 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
May 29	1000	*4,960	140	5.38	1.640	June 16	1200	3,490	98.8	5.11	1.558
June 7	0700	3,330	94.3	4.93	1.503	June 27	1300	2,160	61.2	4.45	1.356

Minimum daily discharge, 245 ft^3/s (6.94 m^3/s) Dec. 11, 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	357	353	340	360	320	270	339	999	2980	1770	446	396
2	351	348	330	370	310	270	347	1080	2740	1760	438	376
3	344	355	320	370	310	300	366	1130	2740	1630	423	368
4	340	349	310	370	310	310	390	1000	2750	1420	419	364
5	343	344	300	380	300	300	397	1040	2810	1270	420	344
6	348	335	290	380	300	290	414	1200	3010	1160	432	336
7	362	332	280	380	290	290	455	1250	2810	1090	352	320
8	349	325	270	380	300	280	464	1230	3030	1010	394	312
9	347	322	260	380	300	280	465	1160	2470	944	436	312
10	352	317	250	380	290	280	496	1110	2040	866	436	309
11	343	314	245	370	290	280	480	1050	1930	820	398	317
12	349	317	245	370	280	280	461	1040	2120	768	356	317
13	343	325	250	370	280	290	464	1070	2470	665	383	305
14	344	323	250	370	280	290	483	1190	2930	672	395	277
15	348	322	255	360	290	310	562	1380	3250	651	415	302
16	347	314	260	360	280	315	611	1630	3310	639	431	299
17	354	308	260	360	290	315	655	1830	3130	540	451	292
18	349	305	270	350	270	315	717	2280	2830	613	451	240
19	337	301	270	345	270	315	762	2870	2420	606	455	247
20	341	300	270	340	290	315	705	3120	1950	574	456	247
21	364	300	280	340	290	320	697	3420	1780	560	531	247
22	387	300	290	330	290	320	723	3560	1870	573	491	251
23	372	300	300	330	290	320	818	3690	1970	562	467	254
24	366	300	310	330	280	320	896	3900	2020	557	455	254
25	359	310	310	330	270	320	882	4130	2050	537	443	251
26	346	310	320	320	270	320	832	4080	2040	516	439	251
27	357	300	320	320	270	320	830	4290	2080	515	472	261
28	356	290	330	320	270	330	899	3900	2050	515	432	268
29	354	340	330	320	---	340	888	4730	1900	490	428	272
30	348	340	340	320	---	345	934	4270	1790	471	416	268
31	346	---	350	320	---	357	---	3560	---	458	424	---
TOTAL	10903	9599	9005	10925	8080	9507	18432	72189	73280	25322	13345	8857
MEAN	352	320	290	352	289	307	614	2329	2443	817	430	295
MAX	387	355	350	380	320	357	934	4730	3310	1770	531	396
MIN	337	290	245	320	270	270	339	999	1780	458	352	240
AC-FT	21630	19040	17860	21670	16030	18860	36560	143200	145400	50230	26470	17570

CAL YR 1978 TOTAL 253016 MEAN 693 MAX 3550 MIN 221 AC-FT 501900
WTR YR 1979 TOTAL 269444 MEAN 738 MAX 4730 MIN 240 AC-FT 534400

NOTE.--NO GAGE HEIGHT RECORD NOV. 20 TO MAR. 30.

09304550 CURTIS CREEK NEAR MEEKER, CO

LOCATION.--Lat 40°02'22", long 107°52'53", in SE¼NW¼ sec.24, T.1 N., R.93 W., Rio Blanco County, Hydrologic Unit 14050005, 0.6 mi (1.0 km) upstream from mouth, 1.6 mi (2.6 km) east of Meeker.

PERIOD OF RECORD.--July 1978 to current year.

COOPERATION.--Chemical quality data are furnished by Water and Power Resources Service.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)
JUL								
06...	1040	.03	7610	8.3	16.0	200	644	1115
14...	1415	.02	7670	8.5	28.0	180	650	1138
20...	1030	.10	7610	8.2	18.0	200	644	1126
27...	1045	.06	7920	8.3	16.5	160	669	1184
AUG								
08...	1230	.03	8190	8.6	21.5	190	784	1230
10...	1330	.04	7920	8.8	23.0	170	772	1230
21...	1500	.06	7850	8.5	20.0	220	699	1161
28...	1245	.04	8050	8.6	18.0	180	748	1195
SEP								
07...	1030	.05	8330	8.2	13.5	200	742	1207
11...	1015	.10	6350	8.2	12.0	180	498	839
21...	1600	.08	7330	8.3	14.5	241	614	1058
25...	1445	.08	7560	8.4	18.0	241	632	1058

DATE	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)
JUL								
06...	22	668	54	4294	296	7780	10.6	.63
14...	20	491	54	4496	312	7980	10.9	.43
20...	18	668	0	4246	307	7720	10.5	2.08
27...	18	452	73	4745	291	8400	11.4	1.36
AUG								
08...	24	296	90	5245	287	9100	12.4	.74
10...	20	337	77	5145	305	8800	12.0	.95
21...	20	439	72	4918	284	8740	11.9	1.42
28...	20	423	73	5245	264	9040	12.3	.98
SEP								
07...	22	535	0	5043	278	8960	12.2	1.21
11...	18	181	0	3647	190	6260	8.51	1.69
21...	20	561	60	4421	267	7850	10.7	1.70
25...	24	613	37	4596	256	8120	11.0	1.75

09304550 CURTIS CREEK NEAR MEEKER, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
OCT								
02...	1300	.08	7620	8.4	15.0	231	663	1081
11...	1500	.08	7390	8.3	13.5	251	626	1092
17...	1315	.10	7800	8.2	9.5	251	644	1069
24...	1500	.10	7730	8.1	8.7	271	669	1081
NOV								
03...	1315	.10	7500	8.1	9.0	261	639	1104
08...	1400	.12	7670	8.4	5.0	261	614	1035
13...	1500	.15	7670	8.2	1.0	261	632	1069
20...	1220	.14	7500	8.0	.0	301	632	1058
28...	1530	.07	7500	7.9	.0	321	657	1092
DEC								
08...	1400	.06	8050	8.0	.0	311	657	1138
12...	1510	.06	8180	8.0	.0	301	693	1207
21...	1400	.07	7670	8.1	.5	331	748	1172
28...	1030	.04	7560	8.0	.0	321	650	1104
JAN								
05...	1500	.06	7430	8.1	.0	311	614	1000
09...	1500	.06	7660	7.9	.0	321	620	1035
16...	1630	.10	7130	7.9	.5	291	559	943
22...	1545	.10	7710	8.0	1.0	291	596	966
29...	1530	.06	6620	8.0	.5	271	486	954
FEB								
05...	1600	.06	7280	7.9	.5	301	596	989
12...	1500	.06	6450	8.2	.5	241	498	839
21...	1530	.06	5930	8.1	.0	226	480	799
28...	1500	.07	5800	8.2	.5	226	453	759
MAR								
07...	1500	.78	4560	8.3	2.0	164	340	538
13...	1630	1.4	4040	8.2	3.0	160	285	483
21...	1550	1.4	3860	8.3	7.0	156	258	451
26...	1450	1.4	3150	8.5	9.5	128	212	354
APR								
02...	1530	1.4	3800	8.1	7.0	144	272	460
10...	1500	2.0	2550	8.4	7.0	104	168	271
16...	1105	3.2	3030	8.2	13.5	120	212	340
24...	1105	1.1	3490	8.2	12.0	136	233	405
MAY								
02...	1345	1.0	4130	8.2	11.0	148	275	492
08...	0925	1.8	3380	8.3	3.0	128	233	276
14...	1045	1.7	3380	8.3	13.0	140	233	382
24...	1500	.94	3960	8.3	22.0	136	265	492
31...	0849	1.1	3440	8.2	9.0	116	238	423
JUN								
07...	0940	.64	3580	8.1	13.5	132	289	520
16...	1442	.64	3560	8.2	23.0	112	258	460
22...	0920	.46	3990	8.3	12.0	124	289	510
29...	1230	.30	4200	8.2	22.5	135	301	558
JUL								
13...	1030	.12	5460	8.1	16.5	160	438	776
19...	1300	.18	5100	8.2	12.3	135	389	707
AUG								
02...	0930	1.2	4420	8.2	14.0	124	340	607
10...	0945	.09	5160	8.3	16.0	130	392	707
17...	1350	.18	4820	8.2	18.0	130	359	667
24...	1045	.24	3530	8.3	15.0	88	255	455
30...	1300	.16	4140	8.2	13.0	108	289	524
SEP								
13...	1110	2.7	5700	8.2	9.0	160	426	753
21...	1100	.06	6110	8.2	10.0	185	486	862

09304550 CURTIS CREEK NEAR MEEKER, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)
OCT								
02...	20	577	60	4671	105	8120	11.0	1.75
11...	20	582	73	4496	269	8070	11.0	1.74
17...	18	776	0	4496	275	8140	11.1	2.20
24...	22	805	0	4496	291	8250	11.2	2.23
NOV								
03...	18	781	0	4471	277	8100	11.0	2.19
08...	18	645	67	4346	274	7780	10.6	2.52
13...	20	763	0	4271	330	7960	10.8	3.22
20...	16	876	0	4296	303	7950	10.8	3.01
28...	18	965	0	4446	300	8280	11.3	1.56
DEC								
08...	22	982	0	4496	321	8650	11.8	1.40
12...	18	1025	0	4671	360	8670	11.8	1.40
21...	22	992	0	4995	324	9150	12.4	1.73
28...	12	1016	0	4546	300	8360	11.4	.90
JAN								
05...	18	852	0	4221	258	7790	10.6	1.26
09...	16	840	0	4271	269	7850	10.7	1.27
16...	20	946	0	3697	263	7190	9.78	1.94
22...	20	937	0	3971	275	7600	10.3	2.05
29...	14	663	0	3746	204	6680	9.08	1.08
FEB								
05...	20	937	0	4021	277	7630	10.4	1.24
12...	20	882	0	3372	232	6090	8.28	.99
21...	18	942	0	3197	184	5790	7.87	.94
28...	17	937	0	2985	184	5740	7.81	1.08
MAR								
07...	13	685	17	2078	151	3890	5.29	8.19
13...	13	626	0	1898	129	3530	4.80	14.2
21...	12	654	5	1718	138	3250	4.42	13.1
26...	13	522	66	1309	106	2630	3.58	10.6
APR								
02...	15	693	0	1638	128	3300	4.49	12.5
10...	12	436	48	1009	89	1920	2.61	10.4
16...	13	705	0	1219	83	2390	3.25	20.6
24...	14	665	0	1439	117	2820	3.84	8.83
MAY								
02...	13	717	0	1719	156	3520	4.79	9.69
08...	13	573	14	1389	115	2800	3.81	13.8
14...	12	635	27	1428	103	2730	3.71	12.6
24...	12	693	0	1719	136	3260	4.43	8.27
31...	12	751	0	1455	114	2790	3.79	8.29
JUN								
07...	15	715	0	1788	148	3580	4.87	6.19
16...	13	665	0	1499	112	2890	3.93	4.99
22...	12	534	72	1719	134	3300	4.49	4.10
29...	16	680	0	1936	136	3560	4.84	2.97
JUL								
13...	21	751	0	2847	177	5090	6.92	1.73
19...	23	736	0	2623	155	4650	6.32	2.26
AUG								
02...	17	732	0	209	137	4020	5.47	13.7
10...	19	611	65	2523	165	4740	6.45	1.15
17...	23	717	0	2373	154	4280	5.82	2.08
24...	2.0	598	48	1509	89	2870	3.90	1.88
30...	16	735	0	1818	110	3510	4.77	1.57
SEP								
13...	22	787	0	2885	165	5120	6.96	38.2
21...	21	805	0	3272	200	6020	8.19	.98

09304600 WHITE RIVER AT MEEKER, CO

LOCATION.--Lat 40°02'00", long 107°55'05", in NE¼NE¼ sec.27, T.1 N., R.94 W., Rio Blanco County, Hydrologic Unit 14050005, on right bank, at 10th Street bridge, 0.4 mi (0.6 km) upstream from Flag Creek, and 0.5 mi (1.0 km) downstream from Sulphur Creek.

DRAINAGE AREA.--808 mi² (2,093 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1978 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,200 ft (1,890 m), from topographic map.

REMARKS.--Records poor. Diversions above station for irrigation of about 3,000 acres (12.1 km²) above station and about 12,000 acres (48.6 km²) below.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,290 ft³/s (150 m³/s) May 29, 1979, gage height, 7.13 ft (2.173 m); maximum gage height, about 12.0 ft (3.66 m) Jan. 31, 1979, ice jam; minimum daily discharge, 227 ft³/s (6.43 m³/s), Sept. 25, 1979.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,000 ft³/s (59 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 31	----	---	(a)	b*12.0	3.66	June 16	1200	3,640	103	7.07	2.155
May 29	1030	*5,290	150	7.13	2.173						

a Backwater from ice.
b About.

Minimum daily discharge, 224 ft³/s (6.34 m³/s) Sept. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1										2360	464	321
2										2200	470	312
3										2100	434	299
4										1630	392	285
5										1530	392	276
6										1420	392	258
7										1300	356	267
8										1170	344	312
9										1070	357	258
10										1020	344	263
11										1020	344	321
12										1020	366	330
13										936	422	317
14										856	452	308
15										816	458	326
16										816	392	326
17										832	366	335
18										840	366	362
19										712	366	357
20										704	356	357
21										632	366	366
22										616	335	362
23										616	335	353
24										576	344	348
25										512	344	357
26										482	344	353
27										470	321	353
28										452	321	362
29										452	321	357
30										452	321	353
31										440	308	---
TOTAL										30052	11513	9754
MEAN										969	371	325
MAX										2360	470	366
MIN										440	308	258
AC-FT										59610	22840	19350

09304600 WHITE RIVER AT MEEKER, CO--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	360	339	330	380	320	322	344	768	3080	1770	500	385
2	350	334	330	380	320	330	335	800	2880	1770	490	375
3	340	338	330	390	320	317	312	840	2900	1620	460	370
4	340	395	320	390	320	290	344	720	2940	1470	440	365
5	340	383	310	400	310	312	335	736	2880	1370	455	338
6	350	368	300	400	300	330	353	864	2920	1270	440	334
7	370	336	290	400	310	317	398	904	2860	1220	430	326
8	350	335	280	400	310	322	404	888	2770	1130	430	326
9	340	326	270	400	310	299	398	824	2390	1060	450	326
10	336	316	260	400	300	290	398	784	2040	1000	440	330
11	336	325	260	390	290	304	410	728	1940	944	420	338
12	331	350	260	390	290	317	398	688	2080	904	385	322
13	335	350	260	390	290	317	371	688	2420	816	410	302
14	334	336	260	390	300	312	362	744	2850	736	420	306
15	334	317	270	370	290	317	366	928	3420	704	450	302
16	338	307	270	370	300	322	464	1120	3460	704	475	298
17	350	293	270	370	290	330	542	1280	3170	696	500	278
18	340	305	280	360	300	335	608	1650	2910	662	485	242
19	330	296	280	350	310	322	648	2100	2400	662	500	224
20	327	295	290	350	310	312	554	2370	1940	626	524	238
21	344	295	300	340	310	322	530	2660	1780	614	572	238
22	366	312	310	340	310	340	536	2840	1810	620	530	234
23	357	302	320	340	290	322	640	3020	1890	620	506	242
24	347	292	330	330	290	322	720	3400	1890	608	485	236
25	342	305	330	330	290	322	696	3900	1930	584	475	227
26	328	300	330	330	290	330	616	3920	1890	560	480	230
27	337	281	340	330	290	340	616	3800	1950	572	500	258
28	336	330	340	330	300	386	688	4440	1940	578	450	258
29	336	330	350	330	---	392	700	4900	1890	542	445	270
30	331	330	360	330	---	366	740	4320	1770	524	430	258
31	330	---	370	330	---	366	---	3740	---	506	430	---
TOTAL	10585	9721	9400	11330	8460	10125	14826	61364	72990	27482	14417	8778
MEAN	341	324	303	365	302	327	494	1979	2433	887	465	293
MAX	370	395	370	400	320	392	740	4900	3460	1770	572	385
MIN	327	281	260	330	290	290	312	688	1770	506	385	224
AC-FT	21000	19280	18640	22470	16780	20080	29410	121700	144800	54510	28600	17410

WTR YR 1979 TOTAL 259478 MEAN 711 MAX 4900 MIN 224 AC-FT 514700

NOTE.--NO GAGE-HEIGHT RECORD NOV. 28 TO FEB. 28.

09304600 WHITE RIVER AT MEEKER, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1978 to September 1979.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1978 to September 1979.
WATER TEMPERATURES: October 1978 to September 1979.

INSTRUMENTATION.--Water-quality monitor since October 1978.

REMARKS.--Daily maximum and minimum specific-conductance data available in district office.

COOPERATION.--Chemical quality data are furnished by the Water and Power Resources Service.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 680 micromhos Mar. 28; minimum, 208 micromhos May 24.
WATER TEMPERATURES: Maximum, 22.0°C Aug. 5-7, 10; minimum, 0.0°C on many days during December to March.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 680 micromhos Mar. 28; minimum, 208 micromhos May 24.
WATER TEMPERATURES: Maximum, 22.0°C Aug. 5-7, 10; minimum, 0.0°C on many days during December to March.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
JUL								
06...	1300	1420	311	8.2	12.5	39	9.2	9.7
14...	--	856	385	8.4	18.5	50	12	13
20...	1045	701	427	8.1	16.5	55	13	16
27...	1315	470	481	8.5	19.0	59	13	21
AUG								
01...	0830	464	513	8.0	14.0	67	15	21
21...	1130	366	587	8.4	14.5	75	16	26
28...	1300	315	588	8.5	15.5	72	18	29
SEP								
05...	1330	273	633	8.6	18.5	76	19	35
11...	1030	312	646	8.3	13.0	75	19	35
21...	1445	366	583	8.7	10.5	71	17	28
25...	1230	360	579	8.7	12.0	71	16	27

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)
JUL								
06...	2.0	120	0	46	12	184	.25	705
14...	1.0	127	10	61	15	245	.33	566
20...	1.0	152	0	71	18	278	.38	526
27...	1.0	155	4	96	25	318	.43	404
AUG								
01...	2.0	176	0	100	24	336	.46	421
21...	2.0	172	5	111	31	391	.53	386
28...	2.0	165	8	111	35	395	.54	336
SEP								
05...	2.0	161	16	117	46	430	.58	317
11...	2.0	186	1	122	43	424	.58	357
21...	2.0	154	8	116	34	393	.53	388
25...	2.0	136	15	112	34	389	.53	378

09304600 WHITE RIVER AT MEEKER, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)
OCT								
02...	1230	360	571	8.6	11.0	70	15	26
11...	1100	386	572	8.3	8.0	69	15	27
17...	1100	371	583	8.2	7.0	69	15	26
24...	1100	370	549	8.3	6.0	64	14	25
NOV								
03...	0900	329	547	8.4	6.0	63	15	26
08...	1130	344	546	8.8	5.5	65	14	25
13...	1245	344	564	8.6	2.5	63	15	27
20...	1600	292	566	8.7	4.0	67	15	31
28...	1300	330	603	8.4	.5	67	14	34
DEC								
04...	1300	320	569	8.4	.0	66	14	29
12...	--	260	607	8.3	.0	69	15	32
21...	1100	300	521	8.2	.5	63	13	25
28...	1330	393	534	8.2	.0	62	12	25
JAN								
05...	1300	400	535	8.2	.5	61	14	26
08...	1300	400	568	8.1	.0	59	13	33
16...	1300	370	541	8.3	.5	64	13	27
22...	1300	340	553	8.3	1.0	63	14	28
29...	1400	330	589	8.0	.5	64	16	31
FEB								
05...	1300	320	622	8.2	.5	71	16	33
12...	1000	290	574	8.2	.5	67	15	30
21...	1330	310	598	8.2	.0	69	15	33
28...	1030	300	572	8.3	1.0	68	15	30
MAR								
07...	1000	317	574	8.3	1.0	63	15	32
13...	1300	317	605	8.7	2.0	67	15	34
21...	1300	322	653	8.6	4.5	71	17	35
26...	--	330	677	8.7	5.0	76	20	36
APR								
02...	1230	335	659	8.4	5.0	73	20	37
10...	1300	410	588	8.4	8.0	65	18	31
16...	1340	488	626	8.1	11.5	73	21	31
24...	1435	752	472	8.1	10.0	55	13	18
MAY								
02...	1735	808	441	8.2	8.0	52	13	17
08...	1630	880	475	8.1	6.0	52	15	20
14...	1145	808	464	8.3	10.0	56	14	17
24...	1400	2178	260	8.2	10.0	36	7.1	5.9
31...	1435	2570	266	8.1	8.5	36	7.7	5.9
JUN								
07...	1405	2262	268	8.3	6.5	34	7.8	5.9
16...	1500	2992	234	8.0	11.5	30	7.1	4.8
22...	1255	2262	273	8.3	11.5	35	8.3	7.1
29...	1036	2388	261	8.2	10.5	32	7.3	6.4
JUL								
13...	1450	808	417	8.5	18.0	54	12	15
19...	1050	674	486	8.3	14.0	57	15	19
AUG								
02...	1425	485	539	8.4	18.5	67	16	24
10...	0920	445	577	8.1	14.5	69	16	29
17...	1110	506	583	8.2	13.0	67	17	25
24...	1530	485	546	8.5	18.0	68	15	24
30...	1400	430	570	8.2	12.0	69	15	26
SEP								
13...	1620	310	589	8.6	12.5	65	16	32
20...	1426	242	644	8.6	14.5	70	17	38

09304600 WHITE RIVER AT MEEKER, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)
OCT								
02...	2.0	144	10	110	32	361	.49	351
11...	2.0	158	4	109	34	373	.51	389
17...	2.0	162	0	108	34	380	.52	381
24...	2.0	138	10	99	33	351	.48	351
NOV								
03...	1.0	146	2	105	32	353	.48	314
08...	2.0	126	12	109	32	346	.47	321
13...	2.0	127	9	111	34	353	.48	328
20...	2.0	132	10	109	40	376	.51	296
28...	2.0	142	5	118	45	381	.52	339
DEC								
04...	2.0	137	0	111	37	362	.49	313
12...	2.0	157	0	117	42	385	.52	270
21...	2.0	139	0	100	33	325	.44	263
28...	2.0	143	0	104	32	335	.46	355
JAN								
05...	1.0	139	0	103	33	344	.47	372
08...	2.0	137	0	104	44	362	.49	391
16...	2.0	127	7	105	35	361	.49	361
22...	2.0	140	1	106	36	359	.49	330
29...	2.0	134	0	118	42	380	.52	339
FEB								
05...	2.0	154	0	122	43	422	.57	365
12...	2.0	141	0	1.1	39	366	.50	287
21...	2.0	144	0	127	43	387	.53	324
28...	2.0	138	2	115	40	380	.52	308
MAR								
07...	2.0	129	7	120	40	370	.50	317
13...	2.0	138	7	124	14	388	.53	332
21...	2.0	140	1	143	38	422	.57	367
26...	2.0	139	10	158	36	460	.63	410
APR								
02...	2.0	143	10	149	40	448	.61	405
10...	2.0	127	10	130	35	396	.54	438
16...	3.0	150	0	154	30	430	.58	567
24...	2.0	137	0	91	20	307	.42	623
MAY								
02...	2.0	132	0	85	18	292	.40	637
08...	2.0	136	--	93	21	310	.42	737
14...	2.0	132	5	94	20	282	.38	615
24...	1.0	110	0	33	5.3	164	.22	964
31...	1.0	110	0	33	3.9	162	.22	1120
JUN								
07...	1.0	101	2	35	7.4	155	.21	947
16...	1.0	103	0	28	3.2	127	.17	1030
22...	1.0	107	1	38	7.1	174	.24	1060
29...	1.0	104	0	33	6.7	146	.20	941
JUL								
13...	2.0	150	4	69	17	268	.36	585
19...	2.0	162	3	79	20	313	.43	570
AUG								
02...	2.0	154	10	95	28	365	.50	478
10...	2.0	178	0	100	36	391	.53	470
17...	2.0	172	0	108	28	368	.50	503
24...	2.0	142	11	118	28	358	.49	469
30...	2.0	163	0	112	32	361	.49	419
SEP								
13...	2.0	81	8	114	43	378	.51	316
20...	2.0	149	7	120	46	395	.54	258

09304600 WHITE RIVER AT MEEKER, CO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	536	533	586	---	569	624	427	278	280	514	581
2	---	544	531	621	---	568	618	436	284	284	522	595
3	---	545	570	554	---	573	619	435	277	295	511	599
4	---	547	559	511	---	597	598	475	270	316	517	594
5	---	554	531	516	---	582	607	446	268	326	521	597
6	---	554	553	524	---	560	646	419	256	337	---	598
7	---	557	580	546	---	577	646	409	249	340	---	606
8	---	551	---	---	---	578	622	415	264	343	---	612
9	---	552	---	---	---	591	617	---	288	348	---	611
10	---	557	---	---	---	599	611	---	301	357	---	614
11	---	553	---	---	---	583	581	---	298	364	---	612
12	---	566	559	---	---	573	615	---	284	371	---	603
13	---	551	546	---	---	575	645	---	263	349	---	607
14	---	553	564	---	---	583	679	434	248	331	---	608
15	---	561	564	---	551	583	695	386	240	353	---	603
16	576	564	563	---	563	595	642	366	234	376	---	605
17	575	570	572	---	559	607	607	367	235	391	---	611
18	576	554	517	---	595	605	570	328	242	415	---	635
19	577	556	507	---	583	599	531	306	261	425	---	644
20	578	543	527	---	549	606	---	301	288	437	---	633
21	576	544	545	---	564	603	---	296	291	446	---	638
22	560	537	532	---	550	597	---	275	281	459	---	640
23	554	541	528	---	560	608	---	243	271	474	---	634
24	555	547	532	---	542	617	469	227	271	471	509	636
25	553	536	527	---	566	621	465	253	266	484	518	643
26	548	535	559	---	549	632	485	254	266	487	530	651
27	552	545	576	---	538	642	490	245	258	491	525	639
28	545	582	535	---	599	659	469	243	262	497	537	638
29	540	545	531	---	---	649	457	247	270	499	542	632
30	540	527	538	---	---	641	443	257	278	505	565	642
31	534	---	557	---	---	629	---	267	---	506	551	---

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	7.5	4.5	2.0	.0	.5	.5	---	---	3.0	1.0
2	---	---	8.5	4.5	.0	.0	.5	.5	---	---	4.5	1.0
3	---	---	9.0	5.5	.0	.0	.5	.5	---	---	5.0	.5
4	---	---	7.5	4.0	.5	.0	.5	.5	---	---	2.5	.0
5	---	---	7.5	4.5	.5	.0	1.0	.5	---	---	2.5	.0
6	---	---	6.0	2.5	.0	.0	1.0	.5	---	---	5.5	1.0
7	---	---	6.0	2.0	.0	.0	1.0	1.0	---	---	8.0	3.0
8	---	---	7.0	3.0	---	---	---	---	---	---	7.0	3.5
9	---	---	7.0	3.0	---	---	---	---	---	---	5.0	.5
10	---	---	5.5	3.0	---	---	---	---	---	---	4.5	.0
11	---	---	4.0	2.0	---	---	---	---	---	---	5.5	.0
12	---	---	6.0	2.5	1.0	.0	---	---	---	---	6.5	.5
13	---	---	4.5	1.0	.0	.0	---	---	---	---	7.5	1.5
14	---	---	4.0	1.5	.0	.0	---	---	---	---	6.5	1.5
15	---	---	3.0	2.0	.0	.0	---	---	3.5	.0	7.5	2.0
16	11.5	9.0	4.0	1.5	.5	.5	---	---	4.0	.0	8.0	3.5
17	9.5	7.0	2.0	.5	.5	.5	---	---	4.0	.0	8.0	4.0
18	11.5	8.5	3.0	.5	1.0	.5	---	---	2.0	.0	6.5	3.5
19	12.0	6.5	3.5	.5	1.0	.5	---	---	1.5	.0	7.5	2.5
20	8.5	7.0	4.0	.5	.5	.5	---	---	3.5	.0	6.0	3.0
21	9.5	8.0	4.0	.5	.5	.5	---	---	2.0	.0	7.0	3.5
22	8.5	7.0	4.0	1.5	1.0	.5	---	---	1.0	.0	7.0	3.0
23	9.0	4.5	4.0	1.0	1.0	.5	---	---	2.0	.0	6.5	2.0
24	8.0	5.0	3.0	.5	1.0	.5	---	---	3.5	.0	9.0	3.5
25	7.5	4.5	3.5	.5	1.0	.5	---	---	2.0	.0	9.0	3.5
26	7.5	2.5	3.0	1.0	.0	.0	---	---	2.0	.0	8.5	4.5
27	8.0	3.0	2.5	.5	.0	.0	---	---	3.0	.0	7.5	5.5
28	8.0	3.5	.5	.5	.5	.0	---	---	4.0	.0	9.0	4.0
29	8.0	3.5	1.0	.5	.0	.0	---	---	---	---	6.5	5.0
30	6.5	4.5	2.0	.5	.0	.0	---	---	---	---	8.0	4.0
31	8.0	4.0	---	---	.0	.0	---	---	---	---	6.5	4.0

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	6.0	2.5	10.5	8.0	13.5	7.0	14.0	10.5	20.5	12.0	18.5	10.5
2	6.5	2.0	9.0	6.5	14.0	8.0	15.0	10.5	21.5	12.5	18.5	11.0
3	7.0	.5	7.0	4.5	13.0	9.0	14.0	10.5	20.0	11.0	19.0	11.0
4	6.0	2.5	13.5	4.0	15.5	9.5	14.0	9.5	21.0	11.0	18.5	11.5
5	10.5	3.5	13.0	7.5	15.0	8.5	16.0	8.5	22.0	14.5	19.0	10.0
6	13.0	5.0	11.0	7.0	13.5	9.5	13.0	8.5	22.0	14.5	19.0	11.0
7	9.5	6.0	7.0	3.0	12.0	8.5	17.0	9.5	22.0	15.5	19.0	10.5
8	12.5	5.5	6.0	1.0	9.0	7.5	16.5	12.0	20.5	15.5	17.5	12.0
9	12.0	6.0	---	---	12.0	7.5	17.5	11.0	21.0	15.0	17.5	12.0
10	9.0	3.5	---	---	15.0	8.5	18.0	11.5	22.0	15.0	17.0	13.5
11	5.5	1.0	---	---	16.5	10.5	18.5	11.0	21.0	12.0	18.0	11.5
12	9.0	2.0	---	---	17.0	11.0	19.5	12.0	20.0	14.0	17.0	9.5
13	8.0	3.0	---	---	16.0	11.5	19.5	12.5	19.0	15.5	14.0	8.0
14	13.5	5.0	16.5	13.0	15.5	9.5	19.5	11.0	16.0	13.5	15.0	7.0
15	14.0	6.5	15.0	9.5	14.0	10.0	18.0	13.5	15.0	12.5	15.0	6.5
16	15.0	7.0	13.0	8.0	11.5	7.0	16.5	12.5	16.0	12.0	16.0	7.0
17	14.0	8.0	15.0	8.0	11.5	7.0	18.5	11.0	16.0	9.5	16.0	7.5
18	13.0	7.5	15.0	8.0	10.5	7.0	18.5	12.5	15.5	10.5	17.5	8.5
19	11.5	7.5	15.0	8.0	7.5	6.0	19.5	10.5	14.0	11.0	15.0	8.5
20	---	---	15.0	8.0	13.0	5.0	18.5	11.5	13.0	9.5	16.5	9.0
21	---	---	15.0	9.0	14.5	7.5	18.0	11.0	18.0	7.5	16.5	9.0
22	---	---	15.0	8.0	14.0	8.0	19.0	13.0	18.5	10.0	16.0	9.0
23	---	---	15.5	8.5	14.5	8.5	19.0	12.5	19.5	10.0	16.0	8.5
24	10.5	8.0	13.0	7.5	14.5	9.0	20.0	11.5	19.5	12.0	16.5	9.0
25	11.0	4.5	12.5	8.0	14.0	9.0	21.0	13.0	18.5	11.5	15.5	10.0
26	11.5	5.0	15.0	8.0	14.0	9.5	20.0	12.5	19.0	10.5	14.5	10.0
27	13.0	5.5	14.5	8.0	14.0	10.0	18.0	13.5	17.0	10.5	16.0	9.0
28	11.5	8.0	13.5	9.5	15.0	10.0	20.5	13.5	17.5	10.5	15.0	8.0
29	13.5	6.0	11.5	8.0	15.0	10.0	20.0	13.0	18.5	10.0	15.5	7.5
30	12.0	7.0	11.5	7.5	14.5	11.0	19.5	12.0	15.0	10.5	15.5	7.0
31	---	---	12.0	7.5	---	---	20.0	12.0	17.5	9.5	---	---

09304800 WHITE RIVER BELOW MEEKER, CO

LOCATION.--Lat 40°00'48", long 108°05'33", in center of sec.31, T.1 N., R.95 W., Rio Blanco County, Hydrologic Unit 14050005, on left bank 30 ft (9 m) downstream from county bridge, 4.5 mi (7.2 km) downstream from Strawberry Creek, and 10 mi (16 km) west of Meeker.

DRAINAGE AREA.--1,024 mi^2 (2,652 km^2), revised.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1961 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,928 ft (1,807 m), from topographic map.

REMARKS.--Records good except those for winter period, which are fair. Diversion above station for irrigation of about 22,000 acres (89.0 km^2) above station and a few small hay meadows below.

AVERAGE DISCHARGE.--18 years, 620 ft^3/s (17.56 m^3/s), 449,200 acre-ft/yr (554 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,750 ft^3/s (135 m^3/s) June 17, 1978, gage height, 4.46 ft (1.359 m); minimum daily, 85 ft^3/s (2.41 m^3/s) June 28, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,000 ft^3/s (57 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
May 29	1500	*4,150	118	4.17	1.271	June 16	2145	3,540	100	3.86	1.176

Minimum daily discharge, 242 ft^3/s (6.85 m^3/s) Sept. 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	420	395	390	440	360	340	400	746	2550	1960	454	430
2	410	390	395	440	360	360	410	795	2320	1980	448	415
3	405	385	380	440	360	380	420	878	2340	1830	435	405
4	400	385	380	440	350	360	466	774	2380	1620	395	400
5	400	380	385	450	350	350	466	732	2460	1460	405	380
6	400	385	385	450	340	350	514	753	2630	1350	435	370
7	410	375	380	450	360	340	557	878	2950	1280	395	345
8	400	385	370	450	360	340	532	870	2850	1200	435	335
9	400	385	340	450	350	340	514	830	2350	1110	430	326
10	400	375	320	450	340	340	532	795	1860	1010	436	321
11	395	390	320	440	340	340	508	718	1740	950	442	335
12	395	442	320	440	340	350	478	683	1860	894	430	326
13	395	425	320	440	340	350	460	690	2260	830	425	316
14	395	400	330	440	340	360	472	739	2600	767	420	321
15	395	385	330	430	340	370	544	854	3180	732	454	321
16	400	375	330	430	350	370	571	990	3290	718	506	312
17	400	350	340	430	340	370	620	1120	3000	725	544	308
18	405	400	350	420	340	370	676	1310	2920	676	514	273
19	400	370	370	410	360	370	718	1730	2470	690	526	253
20	395	390	370	400	360	370	634	2020	1980	641	578	253
21	405	390	380	390	360	370	606	2340	1740	627	627	257
22	436	405	380	380	360	370	613	2510	1860	634	557	257
23	460	380	390	380	350	370	676	2590	1990	620	532	257
24	425	365	400	380	340	370	739	2880	2080	613	514	253
25	420	390	400	380	340	370	739	3120	2160	571	508	242
26	415	390	400	370	340	370	690	3250	2140	538	490	253
27	405	370	400	370	340	380	655	3450	2220	502	526	273
28	400	390	410	370	340	390	697	3700	2220	538	478	285
29	395	395	420	370	---	400	704	3890	2050	508	456	298
30	395	405	430	370	---	420	704	3600	1960	484	448	285
31	395	---	440	370	---	410	---	3110	---	466	450	---
TOTAL	12571	11647	11555	12870	9750	11340	17315	53345	70610	28524	14595	9405
MEAN	406	388	373	415	348	366	577	1721	2354	920	471	314
MAX	460	442	440	450	360	420	739	3890	3290	1980	627	430
MIN	395	350	320	370	340	340	400	683	1740	466	395	242
AC-FT	24930	23100	22920	25530	19340	22490	34340	105800	140100	56580	28950	18650

CAL YR 1978 TOTAL 275894 MEAN 756 MAX 4010 MIN 267 AC-FT 547200
WTR YR 1979 TOTAL 263527 MEAN 722 MAX 3890 MIN 242 AC-FT 522700

NOTE.--NO GAGE-HEIGHT RECORD DEC. 7 TO APR. 2.

09304800 WHITE RIVER BELOW MEEKER, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1974 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: July 1978 to current year.
WATER TEMPERATURES: July 1978 to current year.

INSTRUMENTATION.--Water-quality monitor since July 1978.

REMARKS.--Daily maximum and minimum specific-conductance data available in district office.

COOPERATION.--Additional chemical quality data are furnished by Water and Power Resources Service (noted by an asterisk in the water year heading).

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 858 micromhos Apr. 15, 1979; minimum, 226 micromhos June 16, 1979.
WATER TEMPERATURES: Maximum, 23.0°C Aug. 7, 1978; minimum, 0.0°C many days during winter months.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 858 micromhos Apr. 15; minimum, 226 micromhos June 16.
WATER TEMPERATURES: Maximum, 22.0°C Aug. 4-7, 9, 10; minimum, 0.0°C many days during December to March.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978 *

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
JUL								
06...	1140	1540	357	8.2	15.0	43	12	12
14...	1600	958	449	8.3	20.0	54	16	18
20...	1230	420	489	8.1	18.0	62	17	20
27...	1130	739	525	8.4	18.5	63	17	25
AUG								
08...	0800	669	576	8.2	16.0	71	17	27
10...	1430	838	653	8.4	20.0	73	23	34
21...	1030	410	665	8.3	12.0	77	21	33
28...	1415	370	643	8.6	17.0	76	22	35
SEP								
05...	0930	303	713	8.4	16.0	82	24	41
11...	1130	321	730	8.2	14.0	82	24	39
21...	1330	410	611	8.3	9.5	77	21	32
25...	1000	400	668	8.5	11.0	76	21	31

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)
JUL								
06...	4.0	139	0	53	10	219	.30	911
14...	2.0	160	4	77	16	285	.39	737
20...	2.0	178	0	88	19	321	.44	364
27...	2.0	183	1	102	23	352	.48	702
AUG								
08...	2.0	200	0	115	25	390	.53	704
10...	2.0	188	12	124	31	431	.59	975
21...	2.0	206	4	134	28	447	.61	495
28...	2.0	190	11	139	32	454	.62	454
SEP								
05...	2.0	209	10	147	39	494	.67	404
11...	2.0	223	0	146	38	486	.66	421
21...	2.0	192	4	137	32	435	.59	482
25...	2.0	183	7	135	32	437	.59	472

09304800 WHITE RIVER BELOW MEEKER, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
OCT								
02...	0945	410	637	8.4	--	75	20	31
11...	1000	395	621	8.2	8.0	71	19	32
17...	0900	395	635	8.2	7.0	71	19	30
24...	1000	415	599	8.2	5.0	67	18	29
NOV								
01...	1030	390	595	8.3	5.5	67	17	31
08...	0930	380	611	8.1	3.0	71	18	30
13...	1030	425	601	8.2	1.0	67	18	29
20...	1420	390	576	8.4	2.0	64	17	30
28...	--	375	553	8.2	.0	63	15	28
DEC								
04...	1000	400	631	8.3	.0	73	18	32
12...	1300	320	659	8.2	.0	75	18	34
18...	0900	447	596	8.3	.5	68	16	30
28...	1100	410	613	8.2	.0	71	16	30
JAN								
05...	1130	450	600	8.1	.5	65	17	31
08...	1100	450	665	8.2	.0	72	18	37
16...	0915	337	595	8.1	.5	68	16	31
22...	1000	380	576	8.1	1.0	63	16	32
29...	0900	370	602	8.0	.5	63	17	34
FEB								
05...	0930	350	631	7.8	.5	67	17	33
12...	0930	335	573	8.1	.5	65	16	31
21...	1100	360	605	8.1	.0	68	17	34
28...	0900	340	599	8.2	.5	67	16	32
MAR								
07...	0830	340	610	8.1	1.0	66	17	35
13...	0930	350	656	8.2	2.0	74	20	37
21...	1100	370	724	8.3	4.5	75	22	47
26...	1000	370	779	8.3	5.0	81	25	49
APR								
02...	0900	453	759	8.3	5.0	79	26	47
09...	1000	532	714	8.2	8.0	76	26	42
16...	1545	587	697	8.1	13.5	75	24	37
24...	1135	774	521	8.2	10.5	59	17	23
MAY								
02...	1650	1030	495	7.4	9.0	55	15	21
08...	1310	1140	498	8.2	4.0	54	16	22
14...	1330	767	505	8.4	13.0	63	16	21
22...	1500	2570	280	8.1	10.5	35	8.7	7.1
24...	1430	2850	269	8.2	10.0	36	7.4	6.9
31...	1340	3070	274	8.1	9.0	36	8.4	6.9
JUN								
07...	1305	2870	283	8.2	7.0	35	8.6	7.4
16...	1026	3360	263	8.0	11.0	33	7.9	6.2
22...	0830	2730	303	8.1	11.0	37	9.5	9.0

09304800 WHITE RIVER BELOW MEEKER, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979 *

DATE	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)
OCT								
02...	2.0	169	8	130	34	406	.55	449
11...	2.0	185	0	125	32	407	.55	434
17...	2.0	183	0	118	33	419	.57	447
24...	2.0	172	0	122	31	385	.52	431
NOV								
01...	2.0	164	1	119	32	609	.83	641
08...	2.0	170	0	125	35	388	.53	398
13...	2.0	162	0	134	32	390	.53	448
20...	1.0	156	3	111	33	380	.52	400
28...	1.0	146	0	114	34	337	.46	341
DEC								
04...	2.0	168	0	132	35	409	.56	442
12...	2.0	175	0	132	38	428	.58	370
18...	2.0	151	4	121	32	383	.52	462
28...	2.0	162	0	129	34	396	.54	438
JAN								
05...	2.0	156	0	117	33	384	.52	467
08...	2.0	171	0	135	41	411	.56	499
16...	2.0	157	0	121	35	393	.53	358
22...	2.0	155	0	123	34	388	.53	398
29...	2.0	142	0	119	38	381	.52	381
FEB								
05...	2.0	149	0	125	37	400	.54	378
12...	2.0	146	0	118	36	360	.49	326
21...	2.0	151	0	125	39	401	.55	390
28...	2.0	153	0	128	40	399	.54	366
MAR								
07...	2.0	153	0	125	40	392	.53	360
13...	2.0	162	0	154	39	439	.60	415
21...	2.0	178	2	173	45	490	.67	490
26...	2.0	184	3	197	48	546	.74	545
APR								
02...	2.0	176	6	200	40	528	.72	646
09...	3.0	171	0	200	30	511	.69	734
16...	4.0	162	0	194	27	474	.64	751
24...	2.0	148	0	124	19	343	.47	717
MAY								
02...	2.0	144	0	102	21	313	.43	870
08...	2.0	142	0	102	17	323	.44	994
14...	2.0	134	11	120	18	314	.43	650
22...	1.4	100	0	39	6.2	--	.21	1090
24...	2.0	110	0	35	4.6	169	.23	1300
31...	1.0	117	0	35	6.0	168	.23	1390
JUN								
07...	1.0	114	0	33	6.0	170	.23	1320
16...	1.0	112	0	31	4.6	152	.21	1380
22...	1.0	117	0	41	6.7	170	.23	1250

09304800 WHITE RIVER BELOW MEEKER, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
JUN								
29...	0907	2180	305	7.9	12.0	37	9.2	8.7
JUL								
13...	0905	846	474	8.3	15.0	59	15	19
19...	0955	704	555	8.1	15.0	63	18	24
AUG								
02...	1400	454	623	8.2	20.0	71	19	29
10...	0830	425	659	8.6	16.0	74	20	34
17...	1425	676	649	8.2	15.0	75	21	30
24...	1435	520	607	8.7	18.0	73	19	30
30...	1050	448	627	8.2	13.0	71	18	31
SEP								
13...	1333	316	700	8.5	13.5	75	21	39
21...	1505	273	754	8.6	15.5	79	23	44

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)
JUN								
29...	1.0	120	0	41	7.4	176	.24	1040
JUL								
13...	2.0	165	2	80	17	305	.41	697
19...	2.0	193	0	98	20	359	.49	682
AUG								
02...	2.0	200	0	116	31	418	.57	512
10...	5.0	188	10	123	34	440	.60	505
17...	3.0	209	0	139	27	431	.59	787
24...	2.0	166	11	138	26	417	.57	585
30...	2.0	188	0	132	29	418	.57	506
SEP								
13...	2.0	187	8	141	38	454	.62	387
21...	2.0	190	11	149	44	481	.65	355

09304800 WHITE RIVER BELOW MEEKER, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)
OCT 31...	0900	395	640	8.1	3.5	--	11.1	--	--	--
NOV 30...	1200	410	568	8.0	1.0	--	12.0	--	--	--
DEC 26...	1100	E400	500	8.1	.0	--	11.8	--	--	--
JAN 26...	1000	E370	565	7.6	.0	--	11.1	--	160	54
FEB 01...	1635	E360	690	7.7	.0	1.6	9.5	1.2	--	K310
MAY 11...	0930	732	550	7.8	7.5	--	9.9	--	K100	78
22...	1500	2570	280	8.1	10.5	--	8.8	--	--	330
JUN 06...	0900	2680	260	8.0	11.0	--	8.8	--	1000	760
AUG 24...	1430	520	590	8.4	18.0	--	9.9	--	--	--
SEP 10...	0915	308	650	7.9	14.0	--	8.3	--	560	310
19...	1500	249	760	7.9	16.0	--	--	--	140	270

DATE	STREP-TOCOCCI FECAL, (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)
OCT 31...	--	--	--	64	--	--	--	--	160	0
NOV 30...	--	230	230	64	16	30	.9	1.3	160	0
DEC 26...	--	230	120	67	16	33	.9	1.6	140	0
JAN 26...	--	230	110	66	16	30	.9	1.5	150	0
FEB 01...	600	--	--	--	--	--	--	--	--	--
MAY 11...	--	250	130	65	21	29	.8	1.9	150	0
22...	260	120	41	35	8.7	7.1	.3	1.4	100	0
JUN 06...	--	110	33	33	7.8	6.8	.3	1.2	100	0
AUG 24...	--	250	88	68	19	33	.9	1.5	190	0
SEP 10...	--	280	120	74	22	40	1.1	1.6	--	--
19...	--	290	120	78	24	46	1.2	2.4	--	--

DATE	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RINE, TOTAL RESI-DUAL (MG/L)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)
OCT 31...	130	140	--	35	.2	14	--	.01	.01	.31
NOV 30...	0	100	--	32	.1	15	337	.12	.00	.44
DEC 26...	110	120	--	35	.1	17	359	.15	.01	.13
JAN 26...	120	130	--	37	.1	16	371	.15	.01	.05
FEB 01...	--	--	.00	--	--	--	--	.24	.09	.21
MAY 11...	120	150	--	20	.1	11	372	.11	.00	.36
22...	82	39	--	6.2	.1	9.8	157	.26	.03	.63
JUN 06...	82	31	--	5.2	.1	9.7	145	.15	.02	.58
AUG 24...	160	140	--	28	.3	17	497	.00	.01	.12
SEP 10...	160	180	--	36	.2	16	466	.01	.01	.29
19...	170	180	--	39	.3	15	488	.06	.00	.55

E ESTIMATED.

K BASED ON NON-IDEAL COLONY COUNT.

09304800 WHITE RIVER BELOW MEEKER, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	BORON, DISSOLVED (UG/L AS B)	IRON, DISSOLVED (UG/L AS FE)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	PERIPHYTON BIOMASS ASH WEIGHT G/SQ M	PERIPHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M
OCT									
31...	.32	.33	.00	30	--	2.0	1.8	.000	.000
NOV									
30...	.44	.56	.05	50	30	3.1	1.3	--	--
DEC									
26...	.14	.29	.04	40	10	--	1.6	--	--
JAN									
26...	.06	.21	.04	40	20	1.9	2.0	--	--
FEB									
01...	.30	.54	.05	--	--	1.6	--	--	--
MAY									
11...	.36	.47	.03	50	20	4.7	3.4	--	--
22...	.66	.92	.12	30	80	12	4.9	--	--
JUN									
06...	.60	.75	.19	40	70	9.8	5.6	--	--
AUG									
24...	.13	.13	.04	40	30	--	11	--	--
SEP									
10...	.30	.31	.04	50	30	2.8	2.7	.870	1.02
19...	.55	.61	.01	50	20	2.8	2.8	--	--

DATE	TIME	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	BARIUM, DISSOLVED (UG/L AS BA)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BERYLLIUM, DISSOLVED (UG/L AS BE)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)
NOV										
30...	1200	380	5	0	0	0	20	10	<1	0
JUN										
06...	0900	3400	30	2	0	0	0	0	0	0
SEP										
19...	1500	140	50	1	1	0	40	0	<1	0

DATE	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)
NOV									
30...	<1	10	20	1	<3	2	0	5	0
JUN									
06...	1	10	0	2	0	8	1	18	0
SEP									
19...	<1	0	10	0	<3	1	1	3	0

09304800 WHITE RIVER BELOW MEEKER, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	LITHIUM TOTAL RECOV-ERABLE (UG/L AS LI)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)
NOV 30...	10	10	60	20	.0	.0	2	1	2
JUN 06...	7	3	110	10	1.6	.9	0	0	10
SEP 19...	20	20	20	10	.0	.0	0	<10	1

DATE	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	CYANIDE TOTAL (MG/L AS CN)
NOV 30...	0	2	1	600	600	.8	10	4	.00
JUN 06...	3	1	0	360	260	1.0	40	10	.00
SEP 19...	0	1	1	790	860	1.0	10	<3	.00

09304800 WHITE RIVER BELOW MEEKER, CO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1										---	581	651
2										---	572	650
3										---	583	660
4										---	598	685
5										---	597	701
6										---	608	706
7										---	612	712
8										---	609	---
9										---	602	---
10										---	628	---
11										---	655	699
12										---	650	664
13										---	656	675
14										---	---	678
15										---	---	663
16										---	---	651
17										457	---	652
18										453	643	650
19										479	640	634
20										488	646	640
21										487	---	637
22										490	---	636
23										495	---	631
24										484	---	636
25										500	---	634
26										518	---	633
27										527	---	638
28										553	664	629
29										563	664	626
30										560	654	613
31										573	646	---

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1							---	---	21.0	15.5	19.5	13.0
2							---	---	21.5	15.0	19.5	14.0
3							---	---	22.0	15.5	19.5	14.5
4							---	---	22.0	15.0	20.5	14.5
5							---	---	21.5	14.0	21.0	15.5
6							---	---	21.0	15.0	21.5	16.0
7							---	---	23.0	15.5	22.0	18.0
8							---	---	22.5	16.0	---	---
9							---	---	22.5	16.5	---	---
10							---	---	21.5	16.0	---	---
11							---	---	20.0	16.0	18.0	15.0
12							---	---	20.5	15.5	16.5	12.0
13							---	---	20.0	16.5	16.0	9.5
14							---	---	---	---	14.5	10.5
15							---	---	---	---	17.0	11.0
16							---	---	---	---	18.0	12.5
17							19.0	17.5	---	---	.0	14.0
18							18.0	14.5	18.0	12.0	13.5	9.5
19							20.0	15.5	18.0	10.5	10.0	8.0
20							21.5	16.0	18.0	12.0	10.0	7.0
21							20.5	16.0	---	---	12.0	6.0
22							20.5	14.5	---	---	14.0	7.5
23							21.5	14.5	---	---	16.0	9.5
24							21.0	14.5	---	---	15.5	10.5
25							21.5	15.0	---	---	16.5	11.5
26							23.0	16.0	---	---	17.0	11.0
27							23.0	16.0	---	---	16.5	10.5
28							20.5	17.0	19.5	17.0	16.5	11.0
29							22.0	16.5	19.5	13.0	16.5	11.0
30							22.5	16.5	19.5	13.0	15.5	9.5
31							20.5	16.0	18.0	14.0	---	---

09304800 WHITE RIVER BELOW MEEKER, CO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	611	556	557	---			---	457	272	300	538	647
2	614	570	---	---			---	463	279	299	538	655
3	611	582	---	---			---	491	273	312	543	655
4	612	576	615	---			---	478	266	331	545	683
5	609	581	591	---			---	473	262	352	552	684
6	605	573	593	---			---	424	250	366	549	685
7	591	571	---	---			---	415	240	377	554	685
8	596	577	---	---			---	470	258	382	550	677
9	600	570	---	639			693	539	289	387	559	689
10	598	582	---	593			691	584	309	398	551	704
11	---	568	652	547			650	571	313	406	545	705
12	---	606	628	549			699	555	299	431	567	707
13	---	586	608	557			756	532	273	453	563	707
14	---	586	617	579			791	---	250	470	554	707
15	---	586	621	591			782	442	236	482	542	699
16	---	590	---	561			688	397	230	491	552	700
17	---	595	---	566			636	375	233	506	603	702
18	---	579	598	564			589	338	240	510	600	729
19	---	578	585	554			548	298	263	516	589	756
20	---	585	596	561			556	282	301	521	576	757
21	---	562	606	580			574	271	319	525	566	755
22	---	557	---	584			565	260	305	533	559	758
23	---	563	---	599			535	256	292	542	556	754
24	570	559	---	637			496	247	289	537	565	752
25	572	558	---	641			484	248	282	532	---	757
26	560	553	---	571			498	248	282	531	---	766
27	569	556	---	591			505	238	279	527	---	770
28	560	---	---	616			490	235	281	531	---	760
29	551	---	---	588			477	234	289	528	---	750
30	541	535	---	628			473	242	300	532	640	753
31	543	---	---	671			---	257	---	532	640	---

09304800 WHITE RIVER BELOW MEEKER, CO--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	13.5	9.0	8.5	5.0	2.0	.0	.5	.5	1.0	1.0	1.0	1.0
2	14.5	7.5	8.5	5.0	.0	.0	.5	.5	1.0	1.0	1.0	1.0
3	12.5	7.5	9.5	6.0	.0	.0	.5	.5	1.0	1.0	1.0	1.0
4	12.0	7.0	8.0	5.0	.0	.0	.5	.5	1.0	1.0	1.0	1.0
5	12.0	7.0	8.0	5.0	.0	.0	.5	.5	1.0	1.0	1.0	1.0
6	12.5	7.0	6.5	3.5	.0	.0	.0	.0	1.0	1.0	1.0	1.0
7	13.0	7.5	6.0	2.0	---	---	.0	.0	1.0	1.0	1.0	1.0
8	12.0	7.5	7.0	2.5	---	---	.0	.0	1.0	.5	6.5	1.0
9	13.5	8.0	7.5	3.0	---	---	.0	.0	1.0	1.0	6.5	2.5
10	13.5	8.0	6.0	2.5	---	---	.0	.0	1.0	1.0	6.0	1.0
11	---	---	3.5	.5	.0	.0	.5	.5	1.0	1.0	6.5	1.0
12	---	---	5.5	2.5	.0	.0	.5	.5	1.0	.5	7.5	1.5
13	---	---	3.5	1.0	.0	.0	.5	.5	1.0	.5	8.5	2.5
14	---	---	3.5	2.0	.0	.0	.5	.5	1.0	.5	7.5	3.0
15	---	---	3.0	2.0	.0	.0	.5	.5	1.0	.5	8.0	3.0
16	---	---	3.0	1.0	.5	.5	.5	.5	1.0	1.0	8.0	4.0
17	---	---	2.5	.5	.5	.5	.5	.5	1.0	1.0	8.5	4.5
18	---	---	2.0	.5	1.0	.5	.5	.5	1.0	1.0	7.5	5.0
19	---	---	2.5	.5	1.0	.5	.5	.5	1.0	1.0	8.5	4.0
20	---	---	2.0	.5	.5	.5	.5	.5	1.0	1.0	7.5	5.0
21	---	---	2.5	.5	.5	.5	.5	.5	1.0	1.0	8.0	5.0
22	---	---	3.0	.5	.5	.5	1.0	.5	1.0	1.0	8.0	4.0
23	---	---	3.5	.5	.5	.5	1.0	1.0	1.0	1.0	8.0	3.0
24	8.0	5.5	2.0	.5	.5	.5	1.0	1.0	1.0	1.0	10.0	4.5
25	7.5	5.5	2.0	.5	.5	.5	1.0	1.0	1.0	1.0	9.5	4.5
26	7.0	3.0	2.0	.5	.0	.0	1.0	1.0	1.0	1.0	9.5	5.5
27	7.5	3.5	2.0	.0	.0	.0	1.0	1.0	1.0	1.0	8.5	6.5
28	8.0	3.5	.0	.0	.0	.0	1.0	1.0	1.0	1.0	7.5	5.0
29	8.0	4.0	.0	.0	.0	.0	1.0	1.0	---	---	7.5	6.0
30	7.0	5.0	.5	.0	.0	.0	1.0	1.0	---	---	8.5	5.0
31	7.5	3.5	---	---	.0	.0	1.0	1.0	---	---	8.0	5.0

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	7.5	4.0	12.0	9.0	11.0	7.5	15.5	13.0	21.0	14.5	19.0	12.0
2	7.5	3.0	10.0	8.5	12.0	8.0	16.0	12.5	21.5	15.5	18.0	12.5
3	7.5	2.0	8.0	6.5	12.0	9.0	15.0	11.5	21.5	15.5	19.0	12.5
4	6.5	3.5	12.5	5.5	13.5	9.5	15.5	10.5	22.0	15.0	19.0	13.0
5	11.5	4.5	13.5	9.0	13.5	9.5	16.5	11.0	22.0	16.0	19.0	12.5
6	12.5	6.0	11.5	8.0	12.5	10.0	15.0	11.5	22.0	17.0	19.5	13.0
7	9.5	6.5	7.5	4.5	11.0	8.5	17.5	10.5	22.0	17.5	18.5	13.0
8	12.5	6.0	6.0	2.5	8.5	7.0	17.5	13.0	21.0	17.5	18.0	13.5
9	10.5	7.0	7.5	4.5	10.5	6.5	18.0	12.0	22.0	17.0	18.0	13.5
10	9.5	4.5	8.0	5.0	14.0	7.5	18.5	13.0	22.0	16.5	18.0	15.0
11	6.0	2.0	9.0	6.5	15.5	10.5	19.5	13.0	21.5	15.5	19.0	13.5
12	8.5	2.5	12.5	7.0	16.0	12.0	20.0	14.0	19.5	16.0	18.0	12.0
13	7.5	4.0	14.5	7.5	15.5	12.0	20.5	15.0	20.5	17.0	15.0	10.5
14	12.0	5.0	15.0	9.5	14.5	12.0	20.5	14.5	17.5	15.0	16.5	9.5
15	13.5	7.0	13.0	9.5	14.0	11.0	20.0	15.5	16.0	13.0	16.0	9.0
16	14.0	8.0	11.0	9.0	13.5	9.5	18.0	15.0	17.0	14.0	17.0	9.5
17	14.0	8.5	13.0	7.5	13.0	9.5	19.5	13.5	16.0	12.5	17.0	10.0
18	13.0	8.5	13.5	10.0	12.0	9.5	19.5	15.0	15.5	13.0	18.0	10.5
19	11.0	8.5	12.5	8.0	9.0	7.5	20.5	14.0	15.5	13.0	16.0	11.5
20	11.5	6.0	12.5	8.0	13.0	6.5	19.0	14.5	14.5	12.0	17.0	11.5
21	11.0	7.5	13.0	8.5	15.5	9.5	18.5	15.0	18.0	10.5	17.5	11.5
22	13.0	7.5	12.5	8.0	15.0	10.5	19.5	15.5	19.5	13.0	17.5	11.5
23	13.5	8.5	13.0	8.5	15.0	11.0	19.5	15.5	19.5	13.5	17.5	11.0
24	11.5	9.5	12.5	8.5	15.5	11.0	21.0	15.0	19.0	14.5	17.5	11.5
25	12.0	8.0	11.5	8.0	14.0	11.5	21.5	15.5	---	---	16.5	12.5
26	12.0	7.0	13.0	8.5	15.0	11.0	19.5	16.0	---	---	16.0	12.5
27	13.5	7.0	12.5	9.0	15.0	11.5	19.5	15.5	---	---	17.5	11.0
28	13.0	9.5	12.0	9.5	15.5	11.5	21.5	16.0	---	---	16.5	10.5
29	13.5	7.5	10.5	8.5	15.0	12.0	21.0	15.5	---	---	16.5	10.0
30	13.5	8.5	10.5	7.0	15.5	12.5	21.0	15.0	15.5	13.0	16.0	9.5
31	---	---	10.5	7.5	---	---	21.5	15.0	18.5	12.0	---	---

09304800 WHITE RIVER BELOW MEEKER, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT					
31...	0900	395	21	22	--
NOV					
30...	1200	410	75	83	--
DEC					
26...	1100	E400	24	29	--
JAN					
15...	1400	337	38	35	--
FEB					
12...	1600	335	32	29	--
MAY					
22...	1505	2570	338	2350	47
JUN					
06...	1145	2680	255	1850	--

E ESTIMATED.

09306007 PICEANCE CREEK BELOW RIO BLANCO, CO

LOCATION.--Lat 39°49'34", long 108°10'57", in SE¼SE¼ sec.32, T.2 S., R.96 W., Rio Blanco County, Hydrologic Unit 14050006, on left bank 20 ft (6 m) downstream from private bridge, 1,100 ft (340 m) upstream from Stewart Gulch, and 14.3 mi (23.0 km) west of Rio Blanco.

DRAINAGE AREA.--177 mi^2 (458 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1974 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,366 ft (1,940 m), from topographic map.

REMARKS.--Records good. Several diversions above station for irrigation of hay meadows.

AVERAGE DISCHARGE.--5 years, 11.8 ft^3/s (0.334 m^3/s), 8,550 acre-ft/yr (10.5 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 520 ft^3/s (14.7 m^3/s) July 19, 1977, gage height, 7.01 ft (2.137 m), from rating based on indirect measurement; minimum daily, 0.60 ft^3/s (0.017 m^3/s) Aug. 9, 10, Sept. 9, 10, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 160 ft^3/s (4.53 m^3/s) May 19, gage height, 4.00 ft (1.219 m), only peak above base of 100 ft^3/s (2.8 m^3/s); minimum daily, 2.0 ft^3/s (0.057 m^3/s) Oct. 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.3	6.5	8.0	8.0	7.1	7.1	12	48	67	11	21	17
2	4.5	6.8	8.0	8.1	7.0	7.3	12	55	64	11	20	15
3	2.6	7.1	8.0	8.2	6.9	7.3	12	65	61	12	20	11
4	3.1	7.7	8.6	8.3	6.8	7.4	13	61	62	11	19	9.6
5	2.9	8.3	7.4	8.0	6.7	7.4	14	49	49	9.2	21	9.9
6	4.8	8.3	7.7	7.7	6.5	7.5	13	53	42	5.3	23	10
7	2.9	8.3	7.5	7.7	6.4	7.5	14	68	43	5.9	23	11
8	5.0	9.6	7.3	7.6	6.2	7.6	22	74	44	7.7	23	11
9	5.0	11	7.1	7.6	6.2	7.7	31	76	41	9.6	23	11
10	4.3	10	6.9	7.5	6.2	7.9	42	76	36	7.6	22	10
11	4.3	11	6.6	7.5	6.2	8.1	26	79	33	8.3	22	10
12	2.6	13	6.4	7.3	6.2	8.3	21	91	29	10	20	12
13	2.2	11	6.2	7.3	6.1	8.5	24	106	28	14	20	12
14	2.9	9.6	6.0	7.2	6.1	8.7	23	121	29	13	20	12
15	2.0	9.6	6.2	7.1	6.1	8.9	33	136	26	14	19	11
16	2.4	9.9	6.4	7.0	6.0	9.2	42	144	24	16	20	11
17	2.2	9.6	6.6	6.9	6.0	9.2	49	150	21	15	20	11
18	3.3	10	6.7	6.8	5.9	9.6	59	152	20	14	19	11
19	3.8	9.9	6.9	6.8	6.2	10	60	156	20	17	20	11
20	2.9	9.9	7.1	7.1	6.5	9.9	49	152	20	17	19	11
21	3.1	8.6	7.1	7.6	6.5	10	45	140	17	16	19	9.6
22	4.3	9.2	7.1	8.0	6.6	9.9	44	122	14	16	17	5.3
23	3.8	9.6	7.1	8.2	6.6	8.9	44	114	11	15	17	6.8
24	3.1	9.2	7.2	8.4	6.7	9.2	47	111	11	14	16	4.5
25	3.1	9.2	7.3	8.6	6.7	9.6	50	114	11	16	16	2.9
26	3.5	8.9	7.4	8.0	6.8	9.9	50	105	7.7	21	16	6.8
27	4.0	8.3	7.5	7.7	7.0	11	51	99	7.7	22	16	6.8
28	5.0	7.7	7.6	7.6	7.1	11	50	93	6.8	20	14	6.5
29	5.3	7.7	7.7	7.5	---	12	52	87	11	19	18	7.1
30	5.6	7.7	7.8	7.4	---	12	51	79	12	20	18	7.4
31	5.6	---	7.9	7.2	---	12	---	71	---	20	17	---
TOTAL	114.4	273.2	223.3	235.9	181.3	280.6	1055	3047	868.2	427.6	598	291.2
MEAN	3.69	9.11	7.20	7.61	6.48	9.05	35.2	98.3	28.9	13.8	19.3	9.71
MAX	5.6	13	8.6	8.6	7.1	12	60	156	67	22	23	17
MIN	2.0	6.5	6.0	6.8	5.9	7.1	12	48	6.8	5.3	14	2.9
AC-FT	227	542	443	468	360	557	2090	6040	1720	848	1190	578

CAL YR 1978 TOTAL 3809.6 MEAN 10.4 MAX 79 MIN 2.0 AC-FT 7560
WTR YR 1979 TOTAL 7595.7 MEAN 20.8 MAX 156 MIN 2.0 AC-FT 15070

09306007 PICEANCE CREEK BELOW RIO BLANCO, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1974 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: December 1974 to current year.
pH: December 1974 to current year.
WATER TEMPERATURE: December 1974 to current year.
DISSOLVED OXYGEN: December 1974 to current year.
SUSPENDED SEDIMENT DISCHARGE: April 1974 to current year.

INSTRUMENTATION.--Automatic pumping sediment sampler since April 1974. Water-quality monitor since December 1974.

REMARKS.--Daily maximum and minimum specific-conductance data available in district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 1,690 micromnos June 21, 1976; minimum, 344 micromnos Apr. 13, 1976.
WATER TEMPERATURES: Maximum, 29.5°C July 25, 1977; minimum, freezing point on many days during winter months each year.
DISSOLVED OXYGEN: Maximum, 15.7 mg/L Oct. 8, 1975; minimum, 5.1 mg/L July 17, 1979.
pH: Maximum, 9.0 units June 21, 1976; minimum, 7.0 units May 24, 1976.
SEDIMENT CONCENTRATIONS: Maximum daily, 20,300 mg/L July 20, 1974; minimum daily, 6 mg/L several days during September 1976.
SEDIMENT LOADS: Maximum daily, 4,580 tons (4,150 t) July 20, 1974; minimum daily, 0.04 ton (0.04 t) Apr. 27, 1977.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 1,380 micromnos Oct. 23; minimum, 606 micromnos Apr. 15.
WATER TEMPERATURES: Maximum, 22.0°C June 29; minimum, freezing point on many days November to April.
DISSOLVED OXYGEN: Maximum, 12.3 mg/L Dec. 21, 22; minimum, 5.1 mg/L July 17.
pH: Maximum, 8.6 units Feb. 20, Apr. 13; minimum, 7.5 units July 17.
SEDIMENT CONCENTRATIONS: Maximum daily, 3,920 mg/L May 18; minimum daily, 8 mg/L, estimated Oct. 10.
SEDIMENT LOADS: Maximum daily, 1,610 tons (1,460 t) May 18; minimum daily, 0.07 ton (0.06 t) Oct. 7.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)
OCT											
25...	1115	E3.1	1350	8.0	5.0	15	--	10.2	640	0	530
NOV											
03...	0930	F7.1	1220	8.3	7.0	--	2.0	10.4	610	--	500
21...	1100	8.5	1140	8.1	1.5	4	--	10.5	520	0	430
DEC											
05...	1145	9.2	1100	8.4	.0	--	--	10.6	--	--	--
JAN											
18...	1100	7.1	1150	8.3	4.0	7	--	10.8	500	0	410
FEB											
07...	1045	E6.4	1020	8.1	.0	--	55	10.7	540	0	443
21...	1030	6.8	1100	8.4	3.0	6	--	10.5	450	39	430
MAR											
13...	1000	E7.1	1010	8.1	3.5	--	12	11.6	540	0	443
APR											
04...	1145	E13	1080	8.3	6.0	5	--	10.6	480	0	390
18...	1100	E59	630	7.6	9.0	70	--	9.0	290	0	240
25...	0930	E50	800	7.8	7.0	--	240	8.7	400	0	328
MAY											
24...	1015	E111	750	7.7	9.5	20	--	8.4	360	0	300
JUN											
19...	1100	21	1000	8.4	9.5	15	--	8.6	520	0	430
JUL											
12...	1030	E10	1220	7.8	14.5	--	3.0	8.1	634	0	520
17...	1540	14	1250	7.5	20.0	20	--	6.2	630	0	520
AUG											
22...	1005	18	975	8.2	10.0	10	--	8.8	360	0	300
SEP											
04...	1015	E9.6	1030	8.3	11.0	--	6.0	9.0	500	--	410
20...	1315	11	1060	8.4	14.0	5	--	9.0	--	--	380
27...	1000	E6.8	1070	8.4	9.0	--	3.0	9.3	512	12	440

E ESTIMATED.

09306007 PICEANCE CREEK BELOW RIO BLANCO, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L)	COLIFORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, (COLS. PER 100 ML)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)
OCT 25...	1115	--	--	--	--	430	0	79	57	170
NOV 21...	1100	--	--	--	--	380	0	63	55	120
DEC 05...	1145	11	--	57	K1800	--	--	--	--	--
JAN 18...	1100	--	--	--	--	350	0	67	44	120
FEB 21...	1030	--	--	--	--	400	0	83	46	120
APR 04...	1145	--	--	--	--	350	0	67	44	110
18...	1100	80	400	260	420	240	7	53	27	70
MAY 24...	1015	72	--	--	--	290	0	63	31	72
JUN 19...	1100	--	--	--	--	370	0	72	47	120
JUL 17...	1540	48	420	K180	1280	420	0	79	54	140
AUG 22...	1005	--	--	--	--	340	47	68	42	100
SEP 20...	1315	15	K100	K20	120	350	0	68	44	110

DATE	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	SULFIDE TOTAL (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	BROMIDE DISSOLVED (MG/L AS BR)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)
OCT 25...	3.6	4.0	--	230	18	.8	--	16	891	.04
NOV 21...	2.7	2.8	--	190	11	.9	--	14	716	.74
DEC 05...	--	3.0	.1	--	--	--	.2	--	--	--
JAN 18...	2.8	3.1	--	180	21	1.0	--	16	701	.49
FEB 21...	2.6	2.7	--	180	15	1.0	--	14	725	.31
APR 04...	2.6	2.6	--	170	16	1.0	--	14	663	.28
18...	2.0	3.5	.0	120	8.4	.5	.1	11	442	.87
MAY 24...	1.9	19	.0	120	9.5	.5	.1	14	515	1.6
JUN 19...	2.7	2.6	--	180	11	.7	--	14	706	.46
JUL 17...	3.0	4.5	--	180	16	.8	.1	17	804	.00
AUG 22...	2.4	2.5	--	180	13	.7	--	17	604	.74
SEP 20...	2.6	3.0	.0	200	15	.9	.1	16	689	.42

K BASED ON NON-IDEAL COLONY COUNT.

09306007 PICEANCE CREEK BELOW RIO BLANCO, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)
OCT										
25...	.01	.05	.09	.01	.01	.99	.70	1.0	.71	.05
NOV										
21...	.01	.75	.53	.02	.02	.54	.49	.56	.51	.03
DEC										
05...	--	--	--	--	--	--	--	--	--	--
JAN										
18...	.02	.51	.53	.04	.06	1.1	.47	1.1	.53	.07
FEB										
21...	.02	.33	.34	.02	.02	.38	.28	.40	.30	.06
APR										
04...	.02	.30	.38	.01	.00	.24	.23	.25	.23	.02
18...	.06	.93	.82	.08	.10	1.8	.90	1.9	1.0	.59
MAY										
24...	.04	1.6	1.6	.03	.00	2.2	.45	2.2	.45	.57
JUN										
19...	.02	.48	.54	.01	.03	.44	.28	.45	.31	.03
JUL										
17...	.02	.02	.03	.04	.00	1.1	.61	1.1	.61	.02
AUG										
22...	.00	.74	.75	.00	.00	.67	.41	.67	.41	.05
SEP										
20...	.04	.46	.42	.01	.00	.39	.43	.40	.43	.01

DATE	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	ARSENIC DIS- SOLVED (UG/L AS AS)	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
OCT									
25...	.05	.03	2	250	30	130	6.4	.5	.10
NOV									
21...	.01	.01	2	240	260	60	5.0	.6	.20
DEC									
05...	--	--	--	--	--	--	--	--	--
JAN									
18...	.02	.01	2	210	20	50	4.9	.5	.00
FEB									
21...	.01	.04	2	210	30	60	5.6	.5	.00
APR									
04...	.01	.00	2	190	10	70	8.7	.6	.00
18...	.12	.01	3	250	480	60	15	11	.00
MAY									
24...	.05	.00	4	90	10	10	44	--	--
JUN									
19...	.03	.00	7	220	30	70	7.1	.6	.00
JUL									
17...	.04	.01	2	260	20	80	13	.7	.00
AUG									
22...	.02	.01	2	190	20	40	13	--	.00
SEP									
20...	.03	.04	2	200	20	30	12	.1	.00

09306007 PICEANCE CREEK BELOW RIO BLANCO, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	BARIUM, DISSOLVED (UG/L AS BA)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BERYLLIUM, DISSOLVED (UG/L AS BE)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)
DEC 05...	--	20	--	--	100	--	--	--	<1	--	0
APR 04...	--	--	--	--	--	--	--	--	--	--	--
18...	500	410	--	--	100	10	0	--	8	--	0
MAY 24...	9000	0	5	400	100	0	0	0	0	30	0
JUL 17...	--	0	--	--	100	--	--	--	<1	--	0
SEP 20...	--	0	3	100	100	--	--	0	<1	10	20

DATE	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	LITHIUM TOTAL RECOVERABLE (UG/L AS LI)	LITHIUM DISSOLVED (UG/L AS LI)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)
DEC 05...	--	--	--	6	--	--	4	--	10	--	--
APR 04...	--	--	--	--	--	--	--	--	--	--	--
18...	19	0	--	15	--	--	4	100	4	--	--
MAY 24...	5	0	18	1	19000	16	0	60	10	470	.1
JUL 17...	--	--	--	2	--	--	0	--	10	--	--
SEP 20...	0	--	1	1	170	3	0	--	10	50	.0

DATE	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	SILVER, DISSOLVED (UG/L AS AG)	STRONTIUM, DISSOLVED (UG/L AS SR)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)
DEC 05...	.0	--	6	--	--	--	1	--	--	1400	--
APR 04...	--	--	--	--	--	--	--	--	--	--	--
18...	.0	4	3	49	5	--	2	--	0	720	--
MAY 24...	.0	6	6	20	6	3	2	0	0	900	60
JUL 17...	.0	--	16	--	--	--	1	--	--	1700	--
SEP 20...	.0	4	<10	3	--	1	1	0	--	1500	10

09306007 PICEANCE CREEK BELOW RIO BLANCO, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	ZINC, DIS-SOLVED (UG/L AS ZN)	GROSS ALPHA, DIS-SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS-SOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	RADIUM 226, DIS-SOLVED, RADON METHOD (PCI/L)	URANIUM DIS-SOLVED, EXTRAC-TION (UG/L)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)
DEC 05...	20	<7.8	1.9	<3.7	1.6	<3.5	1.5	.08	3.2	.00	0
APR 04...	--	7.0	150	4.4	83	4.2	73	.07	2.6	--	--
18...	40	--	--	--	--	--	--	--	--	.00	0
MAY 24...	10	<8.8	88	3.6	53	3.3	49	.08	2.4	.00	0
JUL 17...	<3	<13	17	<4.9	6.9	<4.6	6.2	.11	3.2	.00	1
SEP 20...	<3	<8.5	<.4	<3.9	<.4	<4.0	<.4	.05	2.9	.00	0

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1240	1190	1120	1170	---	1080	1050	840	885	1120	1120	1030
2	1230	1180	1090	1170	---	1070	1040	819	894	1120	1110	1040
3	1250	1180	1140	1090	---	1080	1060	799	903	1130	1120	1060
4	1270	1170	1110	1080	---	1110	1060	830	908	1140	1100	1080
5	1250	1170	1110	1080	---	1090	1040	839	922	1160	1080	1080
6	1270	1160	1090	1090	---	1090	1040	830	938	1240	1060	1070
7	1260	1160	---	1110	---	1070	1020	---	941	1250	1060	1080
8	1240	1150	---	---	---	1080	971	768	---	1220	1050	1080
9	1210	1120	---	---	1090	1110	843	---	---	1220	1050	1080
10	1220	1110	---	---	1090	1110	753	---	---	1280	1050	1080
11	1230	1070	---	---	1090	1080	876	---	900	1280	1040	1080
12	1240	1100	---	---	1090	1070	973	---	1000	1260	1050	1060
13	1280	1090	---	---	1090	1070	982	---	1010	1220	1050	1070
14	1290	1090	---	---	1080	1080	989	---	1010	1250	1050	1070
15	1320	1100	---	---	1090	1060	827	---	1020	1240	1050	1070
16	1310	1100	---	---	1090	1040	---	789	1050	1220	1050	1070
17	1300	1090	1110	---	1090	1070	---	768	1060	1230	1050	1070
18	1290	1090	1070	1090	1100	1080	704	752	1080	1240	1060	1060
19	1300	1090	1100	1100	1090	1090	735	762	1090	1230	1050	1060
20	1310	1110	1110	1100	1080	1080	806	---	1090	1210	1050	1060
21	1330	1240	1110	1110	1080	1080	862	---	1100	1230	1050	1070
22	1320	1210	1110	1100	1070	1060	860	---	1090	1250	1050	1120
23	1330	1200	1100	---	1080	1080	854	796	1110	1250	1050	1110
24	1340	1180	1110	---	1080	1090	840	---	1130	1250	1050	1120
25	1350	1150	1110	---	1090	1080	838	---	1150	1220	1050	1150
26	1290	1140	1140	---	1080	1070	851	---	1170	1160	1050	1120
27	1240	1160	1120	---	1080	1080	854	---	1180	1150	1050	---
28	1210	1150	1090	---	1080	1050	847	---	1180	1160	1040	1120
29	1210	1140	1100	---	---	1040	844	---	1130	1160	1030	1110
30	1190	1120	1090	---	---	1050	840	---	1120	1150	1030	1110
31	1200	---	1130	---	---	1050	---	---	---	1130	1030	---

09306007 PICEANCE CREEK BELOW RIO BLANCO, CO--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	14.0	6.0	9.0	5.0	4.5	2.0	.0	.0	---	---	5.5	2.0
2	13.0	6.5	10.0	5.5	2.0	.0	.0	.0	---	---	6.5	3.0
3	12.0	4.0	9.5	6.0	.0	.0	.0	.0	---	---	7.0	1.0
4	13.0	4.5	8.5	4.5	.0	.0	.0	.0	---	---	5.0	.0
5	12.0	5.0	8.5	5.0	.0	.0	2.0	.0	---	---	6.0	.0
6	13.0	5.0	7.0	3.0	.0	.0	2.5	1.0	---	---	10.0	3.0
7	13.0	5.5	7.0	3.0	---	---	.5	.0	---	---	12.0	3.5
8	12.0	5.0	8.0	3.0	---	---	---	---	---	---	8.5	3.0
9	13.0	5.5	8.5	3.0	---	---	---	---	4.0	2.0	8.0	1.0
10	12.0	5.5	6.5	3.0	---	---	---	---	4.5	.0	8.5	.0
11	12.5	6.0	4.5	.0	---	---	---	---	5.5	1.0	10.5	.0
12	13.0	6.0	6.0	3.5	---	---	---	---	6.0	1.5	11.0	.0
13	11.0	4.0	5.0	1.0	---	---	---	---	6.5	3.0	11.5	1.0
14	12.0	4.0	4.5	2.5	---	---	---	---	8.5	3.0	9.5	.0
15	12.5	5.5	4.5	3.0	---	---	---	---	7.0	1.0	11.5	1.5
16	11.5	4.5	5.0	2.5	---	---	---	---	7.0	1.5	12.0	3.0
17	10.0	6.0	4.5	2.0	.0	.0	---	---	7.5	2.5	12.0	2.5
18	12.5	7.5	4.0	.5	3.5	.0	5.0	3.5	6.0	.0	8.5	3.0
19	13.5	5.0	5.0	.0	3.5	2.0	4.0	1.0	5.0	.5	11.5	3.0
20	10.0	6.0	5.5	1.0	3.0	1.0	2.5	.0	6.5	2.0	10.0	4.0
21	10.0	8.5	4.5	2.0	1.5	.0	1.5	.0	5.0	2.5	9.0	4.0
22	8.5	6.0	5.5	2.0	2.5	.0	1.5	.0	2.0	.0	8.0	2.0
23	11.0	4.0	4.5	1.0	2.0	1.0	---	---	4.0	.0	11.0	1.0
24	10.5	5.0	4.5	.5	3.0	.5	---	---	8.0	.5	13.0	1.5
25	9.5	5.0	5.5	1.0	1.0	.0	---	---	7.0	.0	13.5	2.0
26	10.5	4.0	4.5	1.5	.0	.0	---	---	5.5	.0	13.0	3.0
27	10.5	5.0	3.5	.5	.0	.0	---	---	5.5	2.0	9.0	5.0
28	10.0	4.5	2.5	.0	3.0	.0	---	---	7.0	.0	13.5	5.0
29	10.0	5.0	4.0	1.0	3.0	.0	---	---	---	---	8.0	4.0
30	8.0	5.5	5.0	2.0	.0	.0	---	---	---	---	12.0	3.0
31	---	---	---	---	.0	.0	---	---	---	---	8.5	4.0

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	7.5	2.0	12.5	7.5	16.5	11.0	19.5	11.0	19.0	9.5	19.5	7.5
2	7.0	1.0	9.5	6.5	17.0	6.0	19.5	10.5	20.0	9.5	19.5	8.0
3	11.5	.0	8.5	4.0	17.5	6.5	17.0	10.0	20.0	9.5	20.5	8.0
4	10.5	.5	16.5	3.0	19.0	8.0	18.0	9.0	20.5	9.5	20.0	8.5
5	14.5	4.5	14.5	6.0	19.0	7.5	20.0	9.0	21.0	10.0	20.5	7.5
6	16.5	3.5	13.0	6.5	15.0	8.5	16.0	9.5	18.5	10.5	20.5	8.0
7	16.0	3.5	---	---	13.0	9.0	20.5	9.0	21.5	11.5	18.0	8.0
8	15.5	3.5	10.0	3.5	---	---	19.5	10.0	19.0	11.5	16.0	8.5
9	9.0	2.0	10.5	3.5	---	---	19.5	---	19.5	11.0	18.5	9.0
10	---	---	12.0	3.0	---	---	21.0	10.5	21.0	10.5	18.5	11.0
11	6.0	.5	---	---	---	---	21.0	10.0	20.5	9.0	17.0	9.5
12	11.0	.5	---	---	19.5	8.0	20.5	11.0	19.5	9.5	18.0	7.0
13	12.5	1.0	---	---	19.5	8.5	20.5	11.5	18.0	11.5	14.5	6.0
14	16.0	3.0	---	---	18.5	9.0	20.0	---	14.0	10.0	16.5	6.0
15	15.5	3.0	---	---	18.0	9.0	20.0	12.0	15.0	9.5	17.5	5.0
16	---	---	---	---	19.5	7.5	21.0	12.5	15.5	11.0	18.0	5.5
17	---	---	16.0	7.5	18.5	7.5	20.5	12.5	14.5	9.0	17.5	6.0
18	15.0	5.5	17.0	7.5	15.0	9.0	18.5	12.0	13.0	9.5	18.0	6.5
19	13.5	5.5	18.5	6.5	13.5	8.0	19.5	11.0	13.5	10.0	17.0	7.0
20	13.5	3.5	---	---	18.5	6.5	16.5	11.5	13.5	9.5	16.0	8.0
21	12.5	4.5	---	---	20.0	7.5	18.0	12.0	17.5	8.5	17.5	8.0
22	13.0	6.5	---	---	20.5	7.5	17.5	12.5	20.0	8.5	16.5	8.0
23	14.0	5.5	18.0	7.5	21.0	8.5	18.5	12.0	19.5	9.0	18.0	7.0
24	14.0	7.0	---	---	21.5	9.0	19.5	11.5	20.5	9.5	16.0	7.5
25	13.5	6.5	---	---	21.5	9.0	20.0	11.0	19.0	9.0	16.0	8.5
26	14.5	4.0	---	---	20.0	9.5	17.0	11.5	18.5	9.0	16.5	9.0
27	14.5	4.0	---	---	19.0	9.0	18.5	11.5	20.0	8.5	---	---
28	13.0	6.0	---	---	19.0	8.5	19.5	11.5	19.5	9.5	16.5	7.0
29	13.0	4.0	---	---	22.0	9.5	19.0	11.0	19.5	8.5	17.0	7.0
30	13.0	5.0	---	---	19.5	8.5	18.5	10.0	15.0	9.0	16.5	6.5
31	---	---	---	---	---	---	18.5	9.5	19.0	9.0	---	---

PH (UNITS), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.0	7.9	8.1	..8	---	8.4	8.4	8.2	8.3		---	8.5
2	8.0	7.9	8.2	7.7	---	8.4	8.4	8.3	8.4		---	8.5
3	8.1	8.0	8.1	7.8	---	8.4	8.3	8.3	8.4		---	8.5
4	8.0	8.0	8.1	7.9	---	8.3	8.3	8.3	8.4		---	8.4
5	8.0	8.0	8.2	8.0	---	8.4	8.3	8.3	8.4		---	8.4
6	8.0	8.0	8.1	8.0	---	8.3	8.3	8.3	8.4		---	8.4
7	8.0	8.0	---	8.0	---	8.3	8.3	---	8.4		---	8.4
8	8.0	8.1	---	---	---	8.3	8.2	8.3	---		---	8.4
9	8.0	8.2	---	---	---	8.4	8.2	---	---		8.3	8.4
10	8.0	8.2	---	---	---	8.3	8.1	---	---		8.4	8.4
11	8.0	8.3	---	---	---	8.3	8.1	---	8.2		8.4	8.4
12	8.0	8.2	---	---	---	8.3	8.2	---	---		8.4	8.5
13	8.0	8.3	---	---	---	8.3	8.3	---	---		8.4	8.5
14	8.0	8.3	---	---	---	8.3	8.3	---	---		8.3	8.5
15	7.9	8.3	---	---	---	8.3	8.2	---	8.2		8.4	8.5
16	7.9	8.3	---	---	---	8.3	---	---	8.2		8.3	8.5
17	7.9	8.3	7.9	---	---	8.3	---	8.3	8.2		8.4	8.5
18	7.9	8.3	7.9	8.4	---	8.3	8.2	8.3	8.2		8.4	8.5
19	7.9	8.3	7.9	8.4	---	8.3	8.2	8.3	---		8.4	8.5
20	7.9	8.3	7.9	8.4	8.5	8.3	8.2	---	---		8.4	8.4
21	7.9	8.0	7.9	8.4	8.5	8.3	8.2	---	---		8.5	8.3
22	7.9	8.1	7.9	8.4	8.4	8.4	8.1	---	---		8.4	8.3
23	7.9	8.1	7.9	---	8.4	8.4	8.1	8.4	---		8.4	8.3
24	7.9	8.1	7.9	---	8.4	8.3	8.1	---	---		8.4	8.3
25	7.9	8.1	8.0	---	8.4	8.3	8.1	---	---		8.4	8.2
26	7.9	8.1	7.9	---	8.4	8.3	8.1	---	---		8.5	8.3
27	7.8	8.1	7.9	---	8.4	8.3	8.1	---	---		8.5	---
28	7.8	8.1	7.9	---	8.4	8.4	8.1	---	---		8.5	8.3
29	7.9	8.1	7.9	---	---	8.4	8.1	---	---		8.5	8.3
30	7.9	8.1	7.9	---	---	8.4	8.1	---	---		8.5	8.3
31	7.9	---	7.9	---	---	8.4	---	---	---		8.5	---

DISSOLVED OXYGEN (DO), MG/L, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1			---	---	10.8	10.1	11.7	11.2	---	---	10.3	8.4
2			---	---	12.0	10.5	11.6	11.3	---	---	10.2	8.2
3			---	---	11.8	10.0	11.7	11.4	---	---	10.8	8.2
4			---	---	11.8	10.7	11.7	11.3	---	---	10.8	8.4
5			---	---	11.5	10.6	11.5	10.8	---	---	10.6	8.4
6			---	---	12.0	11.3	11.5	10.9	---	---	10.6	7.2
7			---	---	---	---	12.0	11.6	---	---	---	---
8			---	---	---	---	---	---	---	---	---	---
9			---	---	---	---	---	---	---	---	---	---
10			---	---	---	---	---	---	---	---	---	---
11			---	---	---	---	---	---	---	---	---	---
12			---	---	---	---	---	---	---	---	---	---
13			---	---	---	---	---	---	---	---	---	---
14			---	---	---	---	---	---	---	---	---	---
15			---	---	---	---	---	---	---	---	---	---
16			---	---	---	---	---	---	---	---	---	---
17			---	---	12.1	11.1	---	---	---	---	10.0	7.2
18			---	---	11.1	10.5	11.3	10.3	---	---	10.4	7.8
19			---	---	11.2	10.6	11.4	10.7	11.6	8.7	10.4	7.2
20			---	---	12.0	11.0	12.1	11.0	10.6	8.9	10.7	7.8
21			---	---	12.3	11.5	12.1	11.2	10.4	9.0	10.6	7.8
22			10.7	9.5	12.3	11.0	11.7	11.2	10.4	9.4	10.7	8.2
23			11.4	10.1	11.9	11.4	---	---	10.5	9.0	11.0	7.7
24			11.9	10.0	12.2	11.1	---	---	10.5	8.5	11.3	7.2
25			11.8	9.6	12.2	11.5	---	---	10.8	8.6	10.8	7.3
26			11.8	10.0	12.0	11.3	---	---	10.5	8.7	10.4	7.2
27			11.9	10.4	11.9	11.2	---	---	10.2	8.8	10.3	7.9
28			12.0	10.4	11.4	10.7	---	---	10.6	8.3	10.6	7.0
29			11.6	9.9	11.8	10.7	---	---	---	---	9.6	8.0
30			11.5	9.9	11.9	11.4	---	---	---	---	10.2	7.5
31			---	---	11.9	11.3	---	---	---	---	10.6	8.3

09306007 PICEANCE CREEK BELOW RIO BLANCO, CO--Continued

DISSOLVED OXYGEN (DO), MG/L, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	10.6	8.6	9.6	7.7	8.7	6.7	8.2	6.3	7.9	6.5	9.3	7.0
2	10.8	9.0	9.5	8.8	8.1	6.5	8.7	6.5	8.0	6.5	9.1	7.0
3	11.3	8.2	10.3	9.2	8.4	6.8	9.1	7.0	8.1	6.5	9.1	6.7
4	11.2	8.3	10.7	7.9	8.9	7.0	9.3	6.7	8.2	6.4	9.0	6.7
5	11.0	7.3	10.3	8.2	9.6	7.4	9.5	5.9	8.0	6.5	9.2	6.7
6	11.0	6.9	9.8	8.4	9.7	8.2	9.3	6.3	8.2	6.8	9.2	6.7
7	10.8	7.2	---	---	---	---	9.0	5.7	8.2	6.6	9.2	7.0
8	9.7	7.1	10.2	8.9	---	---	8.7	5.7	8.1	6.9	9.2	7.2
9	9.9	8.0	10.3	7.8	---	---	---	---	8.3	6.9	9.2	6.9
10	---	---	9.3	7.8	---	---	---	---	8.4	6.8	8.8	6.8
11	---	---	---	---	7.5	6.2	---	---	8.7	6.8	9.1	7.1
12	9.8	8.4	---	---	8.7	6.0	---	---	8.5	6.8	9.5	7.1
13	10.2	7.6	---	---	8.5	6.1	---	---	8.2	7.1	9.6	7.6
14	---	---	---	---	8.4	6.3	---	---	8.5	7.6	9.7	7.3
15	---	---	9.1	7.7	8.4	6.5	---	---	8.6	7.6	9.8	7.2
16	---	---	9.6	7.4	8.8	6.2	---	---	8.3	7.4	9.8	7.0
17	---	---	9.9	7.6	8.9	6.5	6.5	5.1	8.7	7.6	9.7	7.0
18	9.5	7.4	9.4	7.3	8.7	7.3	7.5	6.1	8.6	7.9	9.6	7.0
19	9.5	7.8	9.7	7.3	8.8	7.7	7.4	5.8	8.6	7.8	9.6	7.1
20	10.0	7.8	---	---	9.5	6.7	7.4	6.2	8.6	7.8	9.4	7.2
21	9.8	8.1	---	---	9.4	6.6	7.4	5.9	8.9	7.4	9.5	7.0
22	9.3	8.1	---	---	9.5	6.8	7.1	6.0	9.0	6.9	9.6	7.0
23	9.7	8.0	9.4	7.0	9.5	6.9	7.3	5.9	8.9	7.0	9.7	6.8
24	9.4	8.2	---	---	9.4	6.7	7.4	5.9	8.8	6.9	9.7	7.7
25	9.5	8.3	---	---	8.5	6.8	7.5	6.0	8.9	7.1	9.6	6.7
26	10.2	8.1	---	---	---	---	7.2	6.4	9.0	7.1	9.2	7.6
27	10.1	8.2	---	---	8.2	6.7	7.4	6.3	9.0	6.8	---	---
28	9.7	8.4	---	---	8.5	6.8	7.3	6.2	8.9	7.0	9.7	6.9
29	10.2	8.5	---	---	8.5	6.4	7.4	6.2	9.0	7.0	9.6	6.9
30	10.0	8.6	---	---	8.4	6.6	7.6	6.3	8.8	7.6	9.7	7.0
31	---	---	---	---	---	---	7.8	6.5	9.0	7.1	---	---

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM
APR									
27...	1330	53	890	127	18	26	43	--	--
MAY									
17...	1100	154	3800	1580	20	34	58	78	85

DATE	SED. SUSP. FALL DIAM. % FINER THAN .250 MM	SED. SUSP. FALL DIAM. % FINER THAN .500 MM	SED. SUSP. FALL DIAM. % FINER THAN 1.00 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 2.00 MM
APR									
27...	--	--	--	63	69	76	85	89	92
MAY									
17...	94	99	100	--	--	--	--	--	--

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	4.3	---	.44	6.5	29	.50	8.0	35	.76
2	4.5	25	.30	6.8	17	.30	8.0	41	.89
3	2.6	---	.16	7.1	28	.55	8.0	---	1.5
4	3.1	15	.13	7.7	37	.74	8.6	80	1.9
5	2.9	15	.12	8.3	30	.66	7.4	---	1.1
6	4.8	---	.17	8.3	45	.99	7.7	---	1.3
7	2.9	---	.07	8.3	---	1.1	7.5	60	1.2
8	5.0	10	.14	9.6	62	1.6	7.3	---	1.1
9	5.0	---	.16	11	33	.97	7.1	---	1.0
10	4.3	---	.09	10	55	1.5	6.9	---	.90
11	4.3	11	.13	11	127	3.7	6.6	---	.75
12	2.6	28	.13	13	121	4.3	6.4	---	.70
13	2.2	31	.21	11	71	2.0	6.2	---	.65
14	2.9	---	.44	9.6	53	1.3	6.0	42	.68
15	2.0	50	.26	9.6	45	1.1	6.2	42	.70
16	2.4	23	.14	9.9	---	1.1	6.4	48	.83
17	2.2	30	.18	9.6	---	1.0	6.6	104	1.9
18	3.3	32	.28	10	---	1.1	6.7	77	1.4
19	3.8	35	.35	9.9	---	1.1	6.9	38	.71
20	2.9	25	.20	9.9	---	1.0	7.1	38	.73
21	3.1	38	.34	8.6	30	.70	7.1	30	.58
22	4.3	63	.72	9.2	27	.67	7.1	160	3.1
23	3.8	62	.66	9.6	32	.83	7.1	110	2.1
24	3.1	55	.48	9.2	27	.67	7.2	110	2.1
25	3.1	41	.36	9.2	24	.60	7.3	47	.93
26	3.5	42	.42	8.9	32	.77	7.4	36	.72
27	4.0	38	.39	8.3	---	.44	7.5	41	.83
28	5.0	30	.41	7.7	---	.68	7.6	---	1.2
29	5.3	29	.41	7.7	32	.67	7.7	---	1.3
30	5.6	31	.46	7.7	40	.83	7.8	---	1.4
31	5.6	28	.43	---	---	---	7.9	---	1.4
TOTAL	114.4	---	9.18	273.2	---	33.47	223.3	---	36.36

09306007 PICEANCE CREEK BELOW RIO BLANCO, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JANUARY			FEBRUARY			MARCH	
1	8.0	---	1.5	7.1	---	1.0	7.1	130	2.5
2	8.1	---	1.6	7.0	---	.95	7.3	200	3.9
3	8.2	---	1.6	6.9	---	.90	7.3	---	1.1
4	8.3	---	1.7	6.8	---	.85	7.4	---	1.1
5	8.0	---	1.5	6.7	---	.80	7.4	---	1.1
6	7.7	---	1.3	6.5	---	.75	7.5	---	1.2
7	7.7	---	1.3	6.4	---	.70	7.5	---	1.2
8	7.6	---	1.2	6.2	---	.65	7.6	---	1.2
9	7.6	---	1.2	6.2	154	2.6	7.7	---	1.3
10	7.5	---	1.2	6.2	176	2.9	7.9	---	1.4
11	7.5	---	1.2	6.2	110	1.8	8.1	---	1.6
12	7.3	66	1.3	6.2	47	.79	8.3	---	1.7
13	7.3	33	.65	6.1	66	1.1	8.5	---	1.8
14	7.2	36	.70	6.1	82	1.4	8.7	---	2.0
15	7.1	77	1.5	6.1	55	.91	8.9	---	2.1
16	7.0	77	1.5	6.0	77	1.2	9.2	130	3.2
17	6.9	41	.76	6.0	55	.89	9.2	224	5.6
18	6.8	41	.75	5.9	33	.53	9.6	---	3.3
19	6.8	---	.85	6.2	50	.84	10	99	2.7
20	7.1	---	1.0	6.5	38	.67	9.9	90	2.4
21	7.6	---	1.2	6.5	66	1.2	10	100	2.7
22	8.0	---	1.5	6.6	88	1.6	9.9	68	1.8
23	8.2	---	1.6	6.6	99	1.8	8.9	79	1.9
24	8.4	---	1.8	6.7	---	1.2	9.2	82	2.1
25	8.6	---	2.4	6.7	---	.99	9.6	107	2.9
26	8.0	---	1.7	6.8	60	1.1	9.9	100	2.8
27	7.7	---	1.1	7.0	77	1.5	11	69	2.0
28	7.6	---	3.4	7.1	55	1.1	11	93	2.9
29	7.5	---	2.3	---	---	---	12	135	4.6
30	7.4	---	1.1	---	---	---	12	90	3.0
31	7.2	---	1.0	---	---	---	12	94	3.2
TOTAL	235.9	---	43.41	181.3	---	32.72	280.6	---	72.3

09306007 PICEANCE CREEK BELOW RIO BLANCO, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	12	82	2.8	48	1050	138	67	1020	184
2	12	85	2.9	55	1430	213	64	912	158
3	12	90	3.1	65	1700	302	61	1340	225
4	13	79	2.8	61	1080	178	62	1160	197
5	14	87	3.2	49	675	93	49	1020	138
6	13	119	4.4	53	790	118	42	770	90
7	14	157	6.3	68	1560	304	43	772	89
8	22	842	52	74	2300	475	44	1880	220
9	31	1750	151	76	2030	421	41	1060	116
10	42	2770	320	76	1910	394	36	1580	162
11	26	---	65	79	1790	381	33	683	62
12	21	537	30	91	2900	718	29	484	38
13	24	642	43	106	---	990	28	584	47
14	23	962	61	121	---	1200	29	681	52
15	33	2610	243	136	3160	1160	26	1120	78
16	42	2360	276	144	3150	1230	24	823	54
17	49	2900	394	150	3580	1450	21	692	40
18	59	3240	516	152	3920	1610	20	621	34
19	60	2850	464	156	3530	1490	20	411	22
20	49	1560	207	152	3310	1360	20	484	25
21	45	1170	143	140	2900	1090	17	161	7.4
22	44	1020	122	122	3000	977	14	99	3.6
23	44	1100	132	114	2750	844	11	76	2.4
24	47	1460	189	111	2220	662	11	115	3.4
25	50	1150	161	114	2430	746	11	251	8.3
26	50	849	115	105	2040	576	7.7	91	1.9
27	51	1110	151	99	1830	484	7.7	74	1.6
28	50	1240	172	93	1550	386	6.8	47	.87
29	52	1390	198	87	1720	398	11	138	4.2
30	51	1430	199	79	1130	243	12	97	3.1
31	---	---	---	71	1110	217	---	---	---
TOTAL	1055	---	4429.5	3047	---	20848	868.2	---	2067.77

09306007 PICEANCE CREEK BELOW RIO BLANCO, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JULY			AUGUST			SEPTEMBER	
1	11	46	1.4	21	417	24	17	112	5.1
2	11	51	1.6	20	436	24	15	68	2.8
3	12	55	1.7	20	324	18	11	88	2.6
4	11	59	1.7	19	208	11	9.6	70	1.8
5	9.2	58	1.5	21	440	26	9.9	72	1.9
6	5.3	19	.27	23	386	24	10	59	1.6
7	5.9	18	.28	23	344	21	11	68	2.0
8	7.7	33	.68	23	401	24	11	59	1.8
9	9.6	129	3.6	23	371	23	11	64	1.9
10	7.6	107	2.2	22	290	17	10	63	1.7
11	8.3	119	2.7	22	275	16	10	49	1.3
12	10	121	3.4	20	157	8.3	12	75	2.4
13	14	156	6.1	20	139	7.4	12	---	1.5
14	13	112	4.0	20	124	6.6	12	47	1.5
15	14	182	6.6	19	86	4.5	11	---	1.5
16	16	231	9.6	20	146	7.6	11	---	1.0
17	15	264	11	20	258	14	11	37	1.1
18	14	258	10	19	156	8.2	11	34	1.0
19	17	258	12	20	196	10	11	19	.56
20	17	300	14	19	145	7.4	11	45	1.3
21	16	193	8.8	19	140	7.2	9.6	---	3.5
22	16	105	4.4	17	123	5.6	5.3	77	1.1
23	15	82	3.3	17	244	11	6.8	---	2.0
24	14	56	2.0	16	161	7.0	4.5	116	1.4
25	16	155	6.8	16	132	5.7	2.9	77	.60
26	21	433	25	16	106	4.6	6.8	76	1.4
27	22	400	24	16	84	3.6	6.8	58	1.1
28	20	---	20	14	169	6.4	6.5	---	.70
29	19	---	15	18	180	8.7	7.1	---	.95
30	20	---	20	18	92	4.5	7.4	---	.90
31	20	311	17	17	112	5.1	---	---	---
TOTAL	427.6	---	240.63	598	---	371.4	291.2	---	50.01
YEAR	7595.7		28234.75						

09306015 MIDDLE FORK STEWART GULCH NEAR RIO BLANCO, CO

LOCATION.--Lat 39°47'20", long 108°10'23", in NE¼SW¼ sec.16, T.3 S., R.96 W., Rio Blanco County, Hydrologic Unit 14050006, on right bank 0.8 mi (1.3 km) upstream from confluence with East Fork and 12.8 mi (20.6 km) west of Rio Blanco.

DRAINAGE AREA.--24.0 mi² (62.2 km²), revised.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1974 to September 1976, Mar. 22, 1978, to present.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 6,592 ft (2,009.2 m), from topographic map.

REMARKS.--Records excellent. Diversions for irrigation of hay meadows above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3.2 ft³/s (0.091 m³/s) Feb. 9, 1976, gage height, 1.40 ft (0.427 m); no flow most days most years.

EXTREMES FOR CURRENT YEAR.--No flow entire year.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1974 to September 1976, March 1978 to current year.

INSTRUMENTATION.--Water-quality monitor since March 1978.

REMARKS.--No flow during 1979 water year.

09306022 STEWART GULCH ABOVE WEST FORK, NEAR RIO BLANCO, CO

LOCATION.--Lat 39°49'09", long 108°11'08", in SE¼NE¼ sec.5, T.3 S., R.96 W., Rio Blanco County, Hydrologic Unit 14050006, on left bank 0.6 mi (1.0 km) upstream from mouth, about 300 ft (91 m) above mouth of West Fork Stewart Gulch, and 14.2 mi (22.8 km) west of Rio Blanco.

DRAINAGE AREA.--44.0 mi² (114 km²), revised.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1974 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,392 ft (1,948 m), from topographic map.

REMARKS.--Records good. Diversion immediately upstream from gage for irrigation of about 20 acres (81,000 m²) of grassland.

AVERAGE DISCHARGE.--5 years, 1.53 ft³/s (0.043 m³/s), 1,110 acre-ft/yr (1.37 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 38 ft³/s (1.08 m³/s) July 19, 1977, gage height, 4.05 ft (1.234 m); no flow Aug. 7, 1975.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6.4 ft³/s (0.181 m³/s) at 1000 Aug. 4, due to removal of diversion dam immediately upstream, gage height, 3.07 ft (0.936 m); minimum daily, 0.20 ft³/s (0.006 m³/s) Aug. 1-3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.72	.76	1.2	1.4	1.4	1.3	1.3	1.3	1.8	1.4	.20	.66
2	.72	.76	1.2	1.3	1.3	1.3	1.4	1.4	1.8	1.4	.20	.66
3	.76	.76	1.3	1.3	1.3	1.3	1.4	1.5	1.8	1.4	.20	.66
4	.76	.76	1.3	1.2	1.3	1.3	1.4	1.4	1.8	1.4	.75	.72
5	.76	.76	1.4	1.3	1.3	1.4	1.4	1.4	1.8	1.4	1.0	.72
6	.82	.82	1.4	1.4	1.2	1.4	1.4	1.4	1.8	1.4	1.0	.72
7	.82	.82	1.4	1.4	1.2	1.4	1.4	1.5	1.8	1.4	1.0	.66
8	.82	.82	1.4	1.3	1.2	1.4	1.4	1.5	1.8	1.4	1.1	.72
9	.87	.87	1.4	1.3	1.2	1.4	1.4	1.5	1.8	1.4	1.2	.72
10	.87	.87	1.4	1.2	1.3	1.4	1.4	1.5	1.8	1.4	1.1	.72
11	.87	.93	1.3	1.2	1.3	1.4	1.4	1.5	1.8	1.3	1.1	.72
12	.87	1.0	1.3	1.3	1.4	1.5	1.4	1.5	1.7	1.3	1.0	.72
13	.87	.93	1.3	1.3	1.4	1.5	1.4	1.5	1.7	1.3	1.0	.72
14	.82	1.0	1.3	1.3	1.4	1.5	1.4	1.5	1.7	1.3	1.1	.72
15	.76	1.0	1.3	1.3	1.5	1.5	1.4	1.5	1.7	1.4	1.1	.72
16	.72	1.1	1.3	1.3	1.5	1.5	1.3	1.5	1.7	1.4	1.1	.76
17	.72	1.1	1.3	1.3	1.5	1.5	1.3	1.5	1.7	1.4	.93	.76
18	.72	1.1	1.3	1.6	1.5	1.5	1.3	1.5	1.7	1.4	.93	.76
19	.66	1.1	1.3	1.6	1.4	1.6	1.4	1.5	1.7	1.4	.87	.82
20	.72	1.2	1.3	1.6	1.4	1.6	1.4	1.5	1.7	1.5	.82	.76
21	.72	1.2	1.3	1.6	1.4	1.5	1.4	1.6	1.7	1.5	.82	.76
22	.72	1.1	1.4	1.6	1.4	1.5	1.4	1.6	1.7	1.5	.82	.76
23	.72	1.2	1.3	1.6	1.4	1.4	1.4	1.6	1.6	1.3	.87	.76
24	.76	1.2	1.3	1.5	1.4	1.4	1.4	1.7	1.5	1.3	.87	.82
25	.76	1.2	1.3	1.5	1.4	1.4	1.3	1.7	1.4	.41	.87	.82
26	.82	1.3	1.4	1.5	1.3	1.4	1.3	1.7	1.4	.31	.82	.82
27	.82	1.4	1.4	1.5	1.3	1.4	1.2	1.7	1.4	.25	.76	.82
28	.82	1.3	1.4	1.4	1.3	1.4	1.2	1.7	1.4	.25	.76	.82
29	.82	1.3	1.5	1.4	---	1.5	1.3	1.8	1.4	.25	.76	1.0
30	.87	1.2	1.5	1.4	---	1.4	1.3	1.8	1.4	.25	.76	1.1
31	.82	---	1.4	1.4	---	1.4	---	1.8	---	.25	.72	---
TOTAL	24.30	30.86	41.6	43.3	37.9	44.4	40.8	48.1	50.0	35.27	26.53	22.90
MEAN	.78	1.03	1.34	1.40	1.35	1.43	1.36	1.55	1.67	1.14	.86	.76
MAX	.87	1.4	1.5	1.6	1.5	1.6	1.4	1.8	1.8	1.5	1.2	1.1
MIN	.66	.76	1.2	1.2	1.2	1.3	1.2	1.3	1.4	.25	.20	.66
AC-FT	48	61	83	86	75	88	81	95	99	70	53	45

CAL YR 1978 TOTAL 421.65 MEAN 1.16 MAX 1.7 MIN .01 AC-FT 836
WTR YR 1979 TOTAL 445.96 MEAN 1.22 MAX 1.8 MIN .20 AC-FT 885

09306022 STEWART GULCH ABOVE WEST FORK, NEAR RIO BLANCO, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1974 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1974 to current year.
WATER TEMPERATURE: October 1974 to current year.
SUSPENDED-SEDIMENT DISCHARGE: October 1974 to current year.

INSTRUMENTATION.--Water-quality monitor since October 1974. Pumping sediment sampler since October 1974.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 2,200 micromhos Nov. 10, 1975; minimum, 635 micromhos Sept. 3, 1977.
WATER TEMPERATURES: Maximum, 20.5°C July 3, 1976, June 3, 1977; minimum, 0.5°C Jan. 9, 1977, Dec. 17, 1978, Mar. 3, 1978, Dec. 2, 3, 1978, Jan. 29, 1979.
DISSOLVED OXYGEN: Maximum, 16.6 mg/L Jan. 13, 1976; minimum, 3.6 mg/L Aug. 19, 20, 1977.
pH: Maximum, 8.7 units June 24, 1976; minimum, 7.6 units Oct. 7, 1975.
SEDIMENT CONCENTRATIONS: Maximum daily, 1,350 mg/: June 8, 1975; minimum daily, no flow Aug. 7-9, 1975.
SEDIMENT LOADS: Maximum daily, 10 tons, estimated (9.1 t) June 8, 1975; minimum daily, no flow Aug. 7-9, 1975.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 1,410 micromhos Oct. 25; minimum, 1,100 micromhos Mar. 7.
WATER TEMPERATURES: Maximum, 20.0°C July 25, 28; minimum, 0.5°C Dec. 2, 3, Jan. 20.
DISSOLVED OXYGEN: Maximum, 13.6 mg/L Nov. 25; minimum, 6.8 mg/L Aug. 1-3, Sept. 23.
pH: Maximum, 8.6 units several days in October, June, July; minimum, 7.7 units several days in November, December, June.
SEDIMENT CONCENTRATIONS: Maximum daily, 536 mg/L Mar. 5; minimum daily, 2 mg/L Oct. 10, Nov. 9, 22.
SEDIMENT LOADS: Maximum daily, 2.0 tons (1.8 t) Mar. 5; minimum daily, less than 0.005 ton (0.005 t) Oct. 10, Nov. 9.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	OXYGEN, DIS-SOLVED (MG/L)	NITRO-GEN, DIS-SOLVED (MG/L AS N)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
OCT 25...	0945	.76	1410	7.7	1.0	2	9.0	--	530	130	90	73
NOV 20...	1100	1.1	1360	8.0	8.0	2	11.2	--	560	160	94	79
DEC 05...	1015	1.2	1200	8.4	4.0	--	11.4	--	--	--	--	--
JAN 18...	0930	1.6	1360	8.2	6.5	6	9.6	1.7	520	120	85	75
FEB 21...	1130	1.2	1350	8.4	8.0	4	11.4	.96	530	130	92	72
APR 04...	1000	1.3	1350	8.2	9.5	5	10.6	.80	490	110	76	73
18...	1015	1.3	1250	7.9	12.5	0	10.1	.94	490	68	78	70
JUN 19...	1250	1.7	1300	8.2	10.0	10	9.4	.88	530	110	90	75
JUL 17...	1420	1.4	1380	7.7	17.0	0	8.6	1.6	500	89	78	73
AUG 22...	0900	.87	1250	8.1	8.0	15	9.7	1.2	510	95	87	72
SEP 20...	1105	.76	1320	8.2	11.5	20	9.5	1.2	530	120	92	73

09306022 STEWART GULCH ABOVE WEST FORK, NEAR RIO BLANCO, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	ALKA- LINITY (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER DAY)
OCT 25...	120	2.3	1.7	480	0	390	360	7.2	.3	14	907	1.86
NOV 20...	130	2.4	1.5	490	0	400	370	6.8	.2	14	942	2.90
DEC 05...	--	--	1.9	--	--	--	--	--	--	--	--	--
JAN 18...	120	2.3	1.6	490	0	400	380	6.7	.2	16	931	4.02
FEB 21...	130	2.5	1.4	490	0	402	370	6.5	.2	14	931	3.02
APR 04...	130	2.6	1.3	460	0	380	370	6.4	.2	16	903	3.17
18...	130	2.6	1.3	510	0	420	350	6.1	.4	16	910	3.19
JUN 19...	140	2.6	1.0	520	0	430	350	6.3	.2	14	936	4.30
JUL 17...	120	2.3	1.6	500	0	410	370	6.5	.3	16	919	3.47
AUG 22...	120	2.3	1.2	510	0	420	380	6.3	.2	17	939	2.21
SEP 20...	120	2.3	1.8	--	--	410	380	6.3	.3	17	944	1.94

DATE	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC DIS. (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	ARSENIC DIS- SOLVED (UG/L AS AS)	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C)
OCT 25...	1.0	.01	.45	.46	.03	.00	1	110	20	10	7.6	1.2
NOV 20...	.97	.06	.55	.61	.01	.01	1	100	30	0	2.2	.8
DEC 05...	--	--	--	--	--	--	--	--	--	--	--	--
JAN 18...	.98	.00	.69	.69	.04	.00	1	90	20	10	4.1	1.2
FEB 21...	.81	.04	.11	.15	.03	.03	1	80	20	0	2.1	.6
APR 04...	.75	.00	.05	.05	.02	.00	1	100	0	2	4.3	.9
18...	.77	.01	.16	.17	.01	.00	1	80	10	7	2.6	4.0
JUN 19...	.78	.03	.07	.10	.00	.00	3	120	10	0	3.8	.8
JUL 17...	.80	.01	.75	.76	.03	.01	1	100	10	4	9.5	--
AUG 22...	1.0	.00	.21	.21	.01	.00	1	100	10	2	6.5	.9
SEP 20...	.78	.00	.40	.40	.01	.02	1	80	10	<1	7.7	.1

DATE	TIME	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L)	COLI- FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, (COLS. PER 100 ML)	SULFIDE TOTAL (MG/L AS S)	BROMIDE DIS- SOLVED (MG/L AS BR)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	BARIUM, DIS- SOLVED (UG/L AS BA)	CADMIUM DIS- SOLVED (UG/L AS CD)
DEC 05...	1015	7	10	3	500	.2	.2	10	40	2
APR 18...	1015	8	K73	K13	K25	.0	.1	0	50	<1
JUL 17...	1420	14	2100	K1800	184	.0	.1	0	50	<1
SEP 20...	1105	12	590	440	760	.1	.1	0	50	<1

K BASED ON NON-IDEAL COLONY COUNT.

09306022 STEWART GULCH ABOVE WEST FORK, NEAR RIO BLANCO, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COPPER, DIS- SOLVED (UG/L AS CU)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	ZINC, DIS- SOLVED (UG/L AS ZN)	GROSS ALPHA, DIS- SOLVED (UG/L AS U-NAT)
DEC										
05...	0	1	5	7	.3	4	1	2600	10	<13
APR										
18...	10	0	0	9	.0	<10	1	2900	<3	<15
JUL										
17...	0	0	0	7	.0	<10	1	2900	<3	<13
SEP										
20...	10	2	0	10	.0	<10	1	2900	<3	<13

DATE	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS- SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS- SOLVED (PCI/L AS SR/ YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/ YT-90)	RADIUM 226, DIS- SOLVED, RADON METHOD (PCI/L)	URANIUM DIS- SOLVED, EXTRAC- TION (UG/L)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
DEC										
05...	<.4	<4.3	<.4	<4.0	<.4	.06	3.2	.00	1	--
APR										
18...	4.9	<5.5	2.7	<5.1	2.4	.09	2.8	.00	0	--
JUL										
17...	.8	<4.7	.5	<4.3	.5	.07	2.9	.00	4	--
SEP										
20...	<.4	<5.2	<.4	<5.3	<.4	.08	2.9	.00	0	.00

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1390	1380	1370	---	---	1290	---	1280	---	---	1280	1290
2	1390	1380	1370	---	---	1290	1270	1280	1290	---	1280	1290
3	1390	1380	1380	---	---	1290	1290	1280	1290	---	1280	1290
4	1390	1380	1380	---	---	1300	1290	1290	1280	---	1280	1290
5	1380	1380	1370	---	---	1290	1290	1290	1290	---	1280	1290
6	1380	1380	1370	---	---	1290	1280	1290	---	---	1280	1290
7	1380	1380	1380	---	---	1260	1280	1280	---	---	1280	1290
8	1380	1380	---	---	---	1280	1280	1270	---	---	1280	1290
9	1380	1380	---	---	1300	1290	1280	---	---	---	1280	1290
10	1380	1370	---	---	1300	1290	1270	---	---	---	1280	1290
11	1380	1350	---	---	1300	1280	1270	1280	---	1300	1280	1290
12	1380	1350	---	---	1300	1270	1280	---	---	1290	1280	---
13	1380	1380	---	---	1290	1290	1280	---	1280	1290	1280	---
14	1380	1380	---	---	1290	1290	1290	---	1280	1290	1280	---
15	1390	1380	---	---	1300	1290	1290	---	1280	1290	1280	---
16	1380	1380	---	---	1290	1280	1290	---	1280	1290	1290	---
17	1380	1380	---	---	1300	1280	1280	1290	1280	1280	1300	---
18	1380	1380	---	---	1290	1290	1280	1280	1290	1280	1300	---
19	1380	1380	---	---	1290	1290	1280	1280	1290	1280	1300	---
20	---	1380	---	---	1290	1290	1280	1280	1290	1290	1300	1280
21	---	1380	---	---	1290	1290	1280	1280	1290	1280	1300	1280
22	---	1380	---	---	1290	1290	1280	1280	1290	1280	1300	1280
23	---	1380	---	---	1290	1290	1280	---	1290	1280	1300	1280
24	---	1380	---	---	1290	1290	1280	1280	---	1280	1290	1280
25	---	1360	---	1270	1290	1290	1280	1280	---	1290	1290	1280
26	1380	1370	---	1270	1290	1290	1280	---	---	1280	1290	1280
27	1390	1380	---	1280	1290	1290	1280	---	---	1280	1290	---
28	1380	1380	---	1280	1290	1290	1280	---	---	1280	1290	1290
29	1380	1380	---	1280	---	1260	1280	1280	---	1290	1290	1290
30	1380	1380	---	1290	---	1290	1280	1280	---	1280	1290	1290
31	1380	---	---	1270	---	---	---	1280	---	1280	1290	---

09306022 STEWART GULCH ABOVE WEST FORK, NEAR RIO BLANCO, CO--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	13.0	5.5	12.0	4.0	7.0	4.0	---	---	---	---	9.0	5.0
2	12.0	5.5	13.0	5.0	5.0	.5	---	---	---	---	9.0	5.0
3	11.5	3.5	12.0	5.0	6.0	.5	---	---	---	---	10.0	3.0
4	12.0	4.0	11.0	3.0	6.0	3.0	---	---	---	---	10.5	3.0
5	13.0	4.0	11.0	4.0	5.0	2.0	---	---	---	---	10.0	4.0
6	11.0	4.0	10.0	2.0	4.0	2.0	---	---	---	---	12.5	6.0
7	12.0	3.5	11.0	2.0	3.0	1.0	---	---	---	---	13.5	5.5
8	12.5	3.5	12.0	3.0	---	---	---	---	---	---	12.5	5.0
9	12.0	4.0	11.0	3.0	---	---	---	---	9.0	3.5	11.0	4.0
10	11.0	5.0	7.0	3.0	---	---	---	---	9.5	3.0	12.0	3.0
11	11.0	6.5	7.0	2.0	---	---	---	---	10.0	4.5	13.0	4.0
12	13.0	4.5	7.0	3.0	---	---	---	---	10.0	5.0	13.5	4.0
13	10.0	5.0	7.0	2.0	---	---	---	---	9.0	6.0	13.5	5.0
14	9.5	8.0	7.0	3.0	---	---	---	---	12.0	5.0	13.5	4.0
15	8.0	5.5	6.0	4.0	---	---	---	---	11.0	4.0	13.0	5.0
16	11.5	3.5	8.0	3.0	---	---	---	---	11.5	4.0	13.5	5.0
17	10.5	4.0	8.0	2.5	---	---	---	---	10.5	3.5	13.5	4.0
18	9.5	3.5	8.5	1.5	---	---	---	---	10.5	3.0	10.5	5.0
19	3.5	2.0	9.0	2.0	---	---	8.0	3.0	8.5	4.0	13.5	5.5
20	---	---	10.0	2.0	---	---	8.5	2.5	9.0	4.0	11.5	6.0
21	---	---	9.0	2.5	---	---	7.5	2.0	8.5	4.5	10.5	5.0
22	---	---	9.0	3.0	---	---	5.5	1.5	7.0	3.5	9.0	5.0
23	---	---	8.5	3.0	---	---	6.5	1.0	9.0	3.0	13.5	4.0
24	---	---	8.0	2.0	---	---	6.5	1.5	11.0	3.0	14.5	4.0
25	---	---	10.0	2.0	---	---	8.0	4.0	11.0	3.0	14.5	5.0
26	11.0	4.0	7.0	3.0	---	---	5.0	2.0	9.0	4.0	14.0	5.0
27	12.0	2.5	8.0	1.0	---	---	7.0	1.5	8.5	4.0	10.0	6.0
28	12.0	3.0	6.0	2.0	---	---	7.0	1.5	11.0	3.5	14.0	7.0
29	11.0	3.0	7.0	3.0	---	---	8.0	3.0	---	---	9.0	4.0
30	9.0	4.0	8.0	4.0	---	---	9.0	4.0	---	---	---	---
31	12.0	3.5	---	---	---	---	12.0	2.5	---	---	---	---

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	14.0	7.0	---	---	---	---	19.0	7.0	14.5	6.0
2	13.0	4.0	10.5	7.0	16.5	7.0	---	---	19.0	7.0	14.5	6.0
3	12.0	4.0	10.0	6.0	---	---	---	---	19.0	7.0	15.0	6.5
4	11.5	4.0	17.0	5.5	---	8.0	---	---	17.0	7.0	15.0	6.0
5	15.0	6.0	15.5	6.0	---	---	---	---	16.0	8.0	15.0	6.0
6	15.0	5.0	14.0	5.5	---	---	---	---	16.0	8.0	15.0	6.0
7	15.0	5.0	---	---	---	---	---	---	17.0	9.0	14.0	6.0
8	16.0	5.0	12.5	4.0	---	---	---	---	14.0	9.0	13.5	7.0
9	12.0	5.0	---	---	---	---	---	---	16.0	8.0	14.5	7.0
10	8.0	5.0	---	---	---	---	---	---	16.0	9.0	14.5	8.0
11	8.0	5.0	---	---	---	---	18.0	8.5	16.0	7.0	12.5	7.0
12	12.0	4.0	---	---	---	---	17.5	7.0	15.0	8.0	---	---
13	14.5	4.0	---	---	---	---	17.5	7.5	14.0	9.0	---	---
14	16.0	5.0	---	---	10.5	8.0	16.0	7.5	12.0	8.0	---	---
15	16.0	6.0	---	---	14.5	7.0	17.5	8.0	12.0	8.0	---	---
16	16.5	6.0	---	---	17.5	6.5	18.5	7.5	12.0	8.0	---	---
17	16.5	6.0	---	---	18.0	7.0	17.0	7.5	11.5	7.0	---	---
18	16.0	6.0	17.0	7.0	---	---	16.0	8.0	11.0	7.0	---	---
19	15.0	6.0	17.5	7.0	14.0	8.0	17.0	8.0	11.0	8.0	---	---
20	15.5	5.0	17.5	7.0	17.0	7.0	16.0	8.0	10.5	8.0	---	---
21	14.0	6.0	18.0	7.5	17.5	7.0	17.0	8.0	13.5	7.0	16.0	7.0
22	14.0	6.0	18.0	7.0	18.0	7.0	15.0	8.0	14.0	7.0	14.0	7.0
23	16.0	6.5	---	---	17.5	7.5	16.0	8.0	15.0	7.0	17.0	7.0
24	14.5	7.5	13.5	9.0	---	---	18.0	8.0	14.0	7.0	15.0	7.0
25	14.0	6.0	16.0	8.5	---	---	20.0	8.0	14.0	7.0	14.0	7.0
26	16.0	5.0	---	---	---	---	18.0	8.0	13.0	7.0	15.0	7.0
27	16.5	5.0	---	---	---	---	19.0	8.0	15.0	6.5	---	---
28	14.0	6.0	---	---	---	---	20.0	8.0	15.0	7.0	16.5	6.5
29	15.5	5.5	---	---	---	---	19.0	8.0	14.5	6.0	16.5	6.0
30	14.5	6.0	16.0	6.5	---	---	19.0	7.0	12.0	7.0	16.5	6.0
31	---	---	15.5	6.5	---	---	19.0	7.0	14.5	7.0	---	---

09306022 STEWART GULCH ABOVE WEST FORK, NEAR RIO BLANCO, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	.72	19	.04	.76	14	.03	1.2	8	.03
2	.72	9	.02	.76	16	.03	1.2	20	.06
3	.76	8	.02	.76	29	.06	1.3	---	.08
4	.76	10	.02	.76	4	.01	1.3	---	.08
5	.76	10	.02	.76	3	.01	1.4	---	.10
6	.82	3	.01	.82	9	.02	1.4	29	.11
7	.82	5	.01	.82	---	.02	1.4	23	.09
8	.82	6	.01	.82	9	.02	1.4	---	.09
9	.87	6	.01	.87	2	.00	1.4	---	.09
10	.87	2	.00	.87	17	.04	1.4	---	.10
11	.87	4	.01	.93	4	.01	1.3	---	.10
12	.87	6	.01	1.0	8	.02	1.3	---	.11
13	.87	12	.03	.93	7	.02	1.3	---	.11
14	.82	5	.01	1.0	9	.02	1.3	---	.11
15	.76	5	.01	1.0	21	.06	1.3	---	.11
16	.72	8	.02	1.1	40	.12	1.3	---	.11
17	.72	7	.01	1.1	31	.09	1.3	---	.11
18	.72	7	.01	1.1	37	.11	1.3	---	.11
19	.66	3	.01	1.1	65	.19	1.3	---	.11
20	.72	17	.03	1.2	29	.09	1.3	---	.15
21	.72	19	.04	1.2	5	.02	1.3	---	.15
22	.72	11	.02	1.1	2	.01	1.4	---	.17
23	.72	11	.02	1.2	4	.01	1.3	---	.16
24	.76	12	.02	1.2	10	.03	1.3	---	.16
25	.76	8	.02	1.2	5	.02	1.3	---	.17
26	.82	8	.02	1.3	3	.01	1.4	---	.18
27	.82	9	.02	1.4	31	.12	1.4	---	.19
28	.82	7	.02	1.3	---	.09	1.4	---	.19
29	.82	8	.02	1.3	---	.07	1.5	---	.24
30	.87	9	.02	1.2	14	.05	1.5	---	.24
31	.82	13	.03	---	---	---	1.4	---	.23
TOTAL	24.30	---	0.56	30.86	---	1.40	41.6	---	4.04

09306022 STEWART GULCH ABOVE WEST FORK, NEAR RIO BLANCO, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JANUARY			FEBRUARY			MARCH	
1	1.4	---	.23	1.4	198	.75	1.3	162	.57
2	1.3	---	.22	1.3	176	.62	1.3	---	.61
3	1.3	---	.22	1.3	80	.28	1.3	191	.67
4	1.2	---	.21	1.3	154	.54	1.3	65	.23
5	1.3	73	.26	1.3	126	.44	1.4	536	2.0
6	1.4	54	.20	1.2	116	.38	1.4	109	.41
7	1.4	108	.41	1.2	76	.25	1.4	144	.54
8	1.3	---	.35	1.2	82	.27	1.4	66	.25
9	1.3	---	.33	1.2	122	.40	1.4	100	.38
10	1.2	86	.28	1.3	74	.26	1.4	128	.48
11	1.2	65	.21	1.3	74	.26	1.4	---	.39
12	1.3	39	.14	1.4	84	.32	1.5	82	.33
13	1.3	46	.16	1.4	---	.35	1.5	133	.54
14	1.3	63	.22	1.4	81	.31	1.5	116	.47
15	1.3	55	.19	1.5	88	.36	1.5	121	.49
16	1.3	25	.09	1.5	---	.28	1.5	90	.36
17	1.3	68	.24	1.5	45	.18	1.5	82	.33
18	1.6	62	.27	1.5	91	.37	1.5	187	.76
19	1.6	50	.22	1.4	48	.18	1.6	106	.46
20	1.6	56	.24	1.4	27	.10	1.6	126	.54
21	1.6	59	.25	1.4	42	.16	1.5	109	.44
22	1.6	67	.29	1.4	54	.20	1.5	156	.63
23	1.6	94	.41	1.4	46	.17	1.4	49	.19
24	1.5	57	.23	1.4	60	.23	1.4	106	.40
25	1.5	85	.34	1.4	106	.40	1.4	132	.50
26	1.5	87	.35	1.3	---	.34	1.4	68	.26
27	1.5	77	.31	1.3	79	.28	1.4	73	.28
28	1.4	114	.43	1.3	71	.25	1.4	71	.27
29	1.4	55	.21	---	---	---	1.5	222	.90
30	1.4	130	.49	---	---	---	1.4	173	.65
31	1.4	183	.69	---	---	---	1.4	173	.65
TOTAL	43.3	---	8.69	37.9	---	8.93	44.4	---	15.98

09306022 STEWART GULCH ABOVE WEST FORK, NEAR RIO BLANCO, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	1.3	115	.40	1.3	91	.32	1.8	50	.24
2	1.4	128	.48	1.4	284	1.1	1.8	55	.27
3	1.4	190	.72	1.5	128	.52	1.8	156	.76
4	1.4	168	.64	1.4	130	.49	1.8	200	.97
5	1.4	180	.68	1.4	---	.49	1.8	72	.35
6	1.4	199	.75	1.4	---	.55	1.8	91	.44
7	1.4	243	.92	1.5	99	.40	1.8	66	.32
8	1.4	173	.65	1.5	177	.72	1.8	76	.37
9	1.4	173	.65	1.5	154	.62	1.8	64	.31
10	1.4	183	.69	1.5	236	.96	1.8	---	.39
11	1.4	168	.64	1.5	197	.80	1.8	95	.46
12	1.4	192	.73	1.5	133	.54	1.7	---	.44
13	1.4	178	.67	1.5	128	.52	1.7	---	.41
14	1.4	164	.62	1.5	94	.38	1.7	---	.41
15	1.4	151	.57	1.5	145	.59	1.7	---	.39
16	1.3	120	.42	1.5	140	.57	1.7	---	.39
17	1.3	170	.60	1.5	154	.62	1.7	---	.37
18	1.3	145	.51	1.5	119	.48	1.7	---	.37
19	1.4	136	.51	1.5	144	.58	1.7	77	.35
20	1.4	128	.48	1.5	132	.53	1.7	97	.45
21	1.4	128	.48	1.6	151	.65	1.7	---	.46
22	1.4	118	.45	1.6	139	.60	1.7	---	.46
23	1.4	95	.36	1.6	132	.57	1.6	---	.50
24	1.4	93	.35	1.7	101	.46	1.5	---	.47
25	1.3	75	.26	1.7	102	.47	1.4	122	.46
26	1.3	62	.22	1.7	76	.35	1.4	119	.45
27	1.2	81	.26	1.7	83	.38	1.4	98	.37
28	1.2	86	.28	1.7	80	.37	1.4	77	.29
29	1.3	101	.35	1.8	68	.33	1.4	76	.29
30	1.3	59	.21	1.8	59	.29	1.4	48	.18
31	---	---	---	1.8	53	.26	---	---	---
TOTAL	40.8	---	15.55	48.1	---	16.51	50.0	---	12.39

09306022 STEWART GULCH ABOVE WEST FORK, NEAR RIO BLANCO, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JULY			AUGUST			SEPTEMBER	
1	1.4	---	.27	.20	22	.01	.66	---	.12
2	1.4	95	.36	.20	13	.01	.66	---	.11
3	1.4	49	.19	.20	14	.01	.66	---	.10
4	1.4	38	.14	.75	31	.10	.72	---	.09
5	1.4	36	.14	1.0	26	.07	.72	---	.08
6	1.4	38	.14	1.0	19	.05	.72	---	.06
7	1.4	35	.13	1.0	22	.06	.66	26	.05
8	1.4	30	.11	1.1	34	.10	.72	58	.11
9	1.4	37	.14	1.2	29	.09	.72	19	.04
10	1.4	46	.17	1.1	26	.08	.72	---	.04
11	1.3	50	.18	1.1	15	.04	.72	---	.04
12	1.3	55	.19	1.0	15	.04	.72	---	.04
13	1.3	50	.18	1.0	22	.06	.72	21	.04
14	1.3	49	.17	1.1	28	.08	.72	---	.04
15	1.4	41	.15	1.1	10	.03	.72	---	.04
16	1.4	34	.13	1.1	10	.03	.76	---	.03
17	1.4	41	.15	.93	---	.03	.76	---	.03
18	1.4	53	.20	.93	---	.03	.76	---	.02
19	1.4	52	.20	.87	---	.04	.82	---	.02
20	1.5	46	.19	.82	---	.03	.76	10	.02
21	1.5	46	.19	.82	---	.03	.76	44	.09
22	1.5	37	.15	.82	17	.04	.76	---	.08
23	1.3	32	.11	.87	24	.06	.76	---	.06
24	1.3	24	.08	.87	55	.13	.82	---	.06
25	.41	11	.01	.87	39	.09	.82	---	.04
26	.31	8	.01	.82	17	.04	.82	---	.03
27	.25	16	.01	.76	24	.05	.82	9	.02
28	.25	35	.02	.76	21	.04	.82	45	.10
29	.25	30	.02	.76	27	.06	1.0	122	.33
30	.25	17	.01	.76	81	.17	1.1	72	.21
31	.25	23	.02	.72	---	.15	---	---	---
TOTAL	35.27	---	4.16	26.53	---	1.85	22.90	---	2.14
YEAR	445.96		92.20						

09306025 WEST FORK STEWART GULCH NEAR RIO BLANCO, CO

LOCATION.--Lat 39°47'01", long 108°11'21", in SW¼SE¼ sec.17, T.3 S., R.96 W., Rio Blanco County, Hydrologic Unit 14050006, on left bank 2.1 mi (3.4 km) upstream from mouth, and 13.5 mi (21.7 km) west of Rio Blanco.

DRAINAGE AREA.--14.2 mi² (36.8 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1974 to Sept. 30, 1976, March 21, 1978 to current year.

REVISED RECORDS.--WRD CO 75-2: 1974(M).

GAGE.--Water-stage recorder. Concrete control since Aug. 26, 1974. Altitude of gage is 6,668 ft (2,032 m), from topographic map. Prior to Aug. 26, 1974, at datum 1.50 ft (0.457 m) lower (corrected).

REMARKS.--Records excellent. Diversions above gage for irrigation of small hay meadows.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 0.27 ft³/s (0.008 m³/s) Feb. 10, 1976; maximum gage height, 1.54 ft (0.469 m) Feb. 10, 1976 (backwater from ice); no flow many days each year.

EXTREMES FOR CURRENT YEAR.--No flow entire year.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--May 1974 to September 1976, March 1978 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: May 1974 to September 1976, March 1978 to current year.
WATER TEMPERATURE: May 1974 to September 1976, March 1978 to current year.
SUSPENDED-SEDIMENT DISCHARGE: May 1974 to September 1976.

INSTRUMENTATION.--Water-quality monitor and pumping sediment sampler May 1974 to September 1976. Water-quality monitor since March 1978.

REMARKS.--No flow during 1979 water year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 1,840 micromhos Sept. 24, 25, 1976; minimum, 512 micromhos June 24, 1976.
WATER TEMPERATURES: Minimum, freezing point on many days during winter months.
SEDIMENT CONCENTRATIONS: Maximum daily, 500 mg/L Feb. 11, 1976; no flow many days each year.
SEDIMENT LOADS: Maximum daily, 0.27 ton, estimated (0.24 t) Feb. 10, 1976; no flow many days each year.

09306028 WEST FORK STEWART GULCH AT MOUTH, NEAR RIO BLANCO, CO

LOCATION.--Lat 39°48'45", long 108°11'00", in SE¼SE¼ sec.5, T.3 S., R.96 W., Rio Blanco County, Hydrologic Unit 14050006, on left bank 300 ft (91 m) upstream from mouth and 13.8 mi (22.2 km) west of Rio Blanco.

DRAINAGE AREA.--15.7 mi² (40.7 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1974 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 6,443 ft (1,964 m), from topographic map.

REMARKS.--Records excellent. Diversion above station for irrigation of small hay meadows.

AVERAGE DISCHARGE.--5 years, 0.00 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 38 ft³/s (1.08 m³/s) Sept. 3, 1977, gage height, 1.66 ft (0.506 m); no flow most days each year.

EXTREMES FOR CURRENT YEAR.--No flow entire year.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1974 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1974 to current year.
WATER TEMPERATURE: April 1974 to current year.
SUSPENDED-SEDIMENT DISCHARGE: April 1974 to current year.

INSTRUMENTATION.--Water-quality monitor since April 1974. Automatic pumping sediment sampler since April 1974.

REMARKS.--No flow entire year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SEDIMENT CONCENTRATIONS: Maximum daily, 1,800 mg/L Sept. 3, 1977; no flow many days each year.
SEDIMENT LOADS: Maximum daily, 4.2 tons (3.8 t) Mar. 5, 1975; no flow many days each year.

09306033 SORGHUM GULCH NEAR RIO BLANCO, CO

LOCATION.--Lat 39°47'07", long 108°12'33", in SE¼SW¼ sec.18, T.3 S., R.96 W., Rio Blanco County, Hydrologic Unit 14050006, on left bank 3.3 mi (5.3 km) upstream from mouth and 14.6 mi (23.5 km) west of Rio Blanco.

DRAINAGE AREA.--1.22 mi² (3.16 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1974 to September 1976, March 21, 1978, to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 6,843 ft (2,085.7 m), from topographic map.

REMARKS.--Records excellent.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7.0 ft³/s (0.20 m³/s) July 9, 1975, gage height, 1.71 ft (0.251 m); no flow most days each year.

EXTREMES FOR CURRENT YEAR.--No flow entire year.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1974 to September 1976, March 1978 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1974 to September 1976, March 1978 to current year.
WATER TEMPERATURE: April 1974 to September 1976, March 1978 to current year.
SUSPENDED-SEDIMENT DISCHARGE: April 1974 to September 1976.

INSTRUMENTATION.--Water-quality monitor and pumping sediment sampler April 1974 to September 1976. Water-quality monitor since March 1978.

REMARKS.--No flow during 1979 water year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 380 micromhos Feb. 12, 1976; minimum, 160 micromhos July 31, 1976.
WATER TEMPERATURES: Maximum, 18.0°C July 31, 1976; minimum, 0.0°C Feb. 12, 1976.
SEDIMENT CONCENTRATIONS: Maximum daily, 2,000 mg/L July 9, 1975; no flow many days each year.
SEDIMENT LOADS: Maximum daily, 1.4 tons, (1.3 t) July 18, 1976; no flow many days each year.

REVISIONS.--The maximum daily sediment concentration has been revised to 2,000 mg/L July 9, 1975, and the maximum daily sediment load has been revised to 1.4 tons, (1.3 t) July 18, 1976, these figures supersede those previously published.

09306036 SORGHUM GULCH AT MOUTH, NEAR RIO BLANCO, CO

LOCATION.--Lat 39°49'30", long 108°11'54", in NW¼NW¼ sec.5, T.3 S., R.96 W., Rio Blanco County, Hydrologic Unit 14050006, on left bank 1,400 ft (430 m) upstream from mouth and 14.8 mi (23.8 km) west of Rio Blanco.

DRAINAGE AREA.--3.62 mi^2 (9.38 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1974 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 6,372 ft (1,942.2 m), from topographic map.

REMARKS.--Records excellent.

AVERAGE DISCHARGE.--5 years, 0.01 ft^3/s (<0.001 m^3/s), 7.24 acre-ft/yr (0.009 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 59 ft^3/s (1.67 m^3/s) Sept. 3, 1977, gage height, 2.92 ft (0.890 m), from rating curve extended above 40 ft^3/s (1.13 m^3/s), from slope-area measurement; no flow most of each year.

EXTREMES FOR CURRENT YEAR.--No flow entire year.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1974 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1974 to current year.
WATER TEMPERATURE: October 1974 to current year.
SUSPENDED-SEDIMENT DISCHARGE: October 1974 to current year.

INSTRUMENTATION.--Water-quality monitor since October 1974. Pumping sediment sampler since October 1974.

REMARKS.--No flow entire year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Not determined.
WATER TEMPERATURES: Not determined.
SEDIMENT CONCENTRATIONS: Maximum daily, 7,200 mg/L estimated Aug. 1; no flow many days during year.
SEDIMENT LOADS: Maximum daily, 14 tons (13 t) estimated Aug. 1; no flow many days during year.

09306039 COTTONWOOD GULCH NEAR RIO BLANCO, CO

LOCATION.--Lat 39°49'36", long 108°12'25", in SW¼SE¼ sec.31, T.2 S., R.96 W., Rio Blanco County, Hydrologic Unit 14050006, on right bank 800 ft (240 m) upstream from mouth and 15.4 mi (24.8 km) west of Rio Blanco.

DRAINAGE AREA.--1.20 mi^2 (3.11 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1974 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 6,353 ft (1,936 m), from topographic map.

REMARKS.--Records excellent. No diversion above station.

AVERAGE DISCHARGE.--5 years, 0.01 ft^3/s (<0.001 m^3/s), 7.24 acre-ft/yr (0.009 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 53 ft^3/s (1.50 m^3/s) Sept. 3, 1977, gage height, 2.94 ft (0.896 m); no flow most of each year.

EXTREMES FOR CURRENT YEAR.--No flow entire year.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1974 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1974 to current year.
WATER TEMPERATURE: April 1974 to current year.
SUSPENDED-SEDIMENT DISCHARGE: April 1974 to current year.

INSTRUMENTATION.--Water-quality monitor since April 1974. Automatic pumping sediment sampler since April 1974.

REMARKS.--Daily maximum and minimum specific-conductance data available in district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 225 micromhos Mar. 24, 1976; minimum, 124 micromhos Mar. 27, 1976.
WATER TEMPERATURES: Maximum, 25.0°C Mar. 27, 1976; minimum, 4.5°C Mar. 24, 1976.
SEDIMENT CONCENTRATIONS: Maximum daily, 62,000 mg/L, estimated Sept. 3, 1977; no flow many days each year.
SEDIMENT LOADS: Maximum daily, 200 tons, estimated (181 t) Sept. 3, 1977; no flow many days each year.

EXTREMES FOR CURRENT YEAR.--No flow entire year.

09306042 PICEANCE CREEK TRIBUTARY NEAR RIO BLANCO, CO

LOCATION.--Lat 39°50'01", long 108°13'12", in SE¼NE¼ sec.35, T.2 S., R.97 W., Rio Blanco County, Hydrologic Unit 14050006, on left bank 600 ft (180 m) upstream from mouth and 16.2 mi (26.1 km) west of Rio Blanco.

DRAINAGE AREA.--1.06 mi² (2.75 km²).

PERIOD OF RECORD.--April 1974 to current year.

WATER-DISCHARGE RECORDS

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 6,335 ft (1,931 m), from topographic map.

REMARKS.--Records excellent, except for days of flow which are fair. All flow due to discharge of settling ponds on tract C.

AVERAGE DISCHARGE.--5 years, 0.01 ft³/s (<0.001 m³/s), 7.2 acre-ft/yr (0.01 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 384 ft³/s (10.9 m³/s) revised, Sept. 3, 1977, gage height, 2.57 ft (0.783 m), result of slope-area measurement of peak flow; no flow most of each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2.3 ft³/s (0.065 m³/s) Aug. 22, gage height, 1.35 ft (0.411 m); no flow most of year.

REVISIONS.--The maximum discharge for the water year 1977 has been revised to 384 ft³/s (10.9 m³/s) Sept. 3, 1977, gage height, 2.57 ft (0.783 m), result of slope-area measurement of peak flow, this figure supersedes that published in WDR CO-77-3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.11	.04
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.10	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.10
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.04	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.20	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.18	.00
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.15	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.25	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.07	.05	---
TOTAL	.00	.00	.00	.00	.00	.00	.00	.00	.00	.07	1.12	.14
MEAN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.002	.036	.005
MAX	.00	.00	.00	.00	.00	.00	.00	.00	.00	.07	.25	.10
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	.00	.00	.00	.00	.00	.1	2.2	.3

CAL YR 1978 TOTAL 0.00 MEAN .000 MAX .00 MIN .00 AC-FT .00
WTR YR 1979 TOTAL 1.33 MEAN .004 MAX .25 MIN .00 AC-FT 2.6

09306042 PICEANCE CREEK TRIBUTARY NEAR RIO BLANCO, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1974 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1974 to current year.
WATER TEMPERATURE: April 1974 to current year.
SUSPENDED-SEDIMENT DISCHARGE: April 1974 to current year.

INSTRUMENTATION.--Water-quality monitor since April 1974. Pumping sediment sampler since April 1974.

REMARKS.--Flow occurred only on days shown.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Not determined.
WATER TEMPERATURES: Maximum, 30.0°C Sept. 6, 1979; minimum, 7.0°C Sept. 6, 1979.
SEDIMENT CONCENTRATIONS: Maximum daily, 28,000 mg/L, estimated Sept. 3, 1978; no flow many days each year.
SEDIMENT LOADS: Maximum daily, 900 tons (820 t), estimated Sept. 3, 1978; no flow many days each year.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Not determined.
WATER TEMPERATURES: Maximum, 30.0°C Sept. 6; minimum, 7.0°C Sept. 6.
SEDIMENT CONCENTRATIONS: Maximum daily, 12,200 mg/L Aug. 30; no flow many days during year.
SEDIMENT LOADS: Maximum daily, 18 tons (16 t) Aug. 30; no flow many days during year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)
AUG												
07...	1030	.20	1380	8.6	24.0	45	6.2	250	51	16	230	6.5

DATE	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	BROMIDE DIS-SOLVED (MG/L AS BR)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)
AUG											
07...	232	0	190	.0	460	14	2.2	2.3	54	954	4.9

DATE	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)
AUG											
07...	.34	.33	.66	4.6	.00	80	5	200	210	0	0

DATE	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	ZINC, DIS-SOLVED (UG/L AS ZN)	GROSS ALPHA, DIS-SOLVED (UG/L AS U-NAT)
AUG											
07...	2	80	0	30	10	.7	19	1	1100	10	<15

09306042 PICEANCE CREEK TRIBUTARY NEAR RIO BLANCO, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS-SOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	RADIUM 226, DIS-SOLVED, RADON METHOD (PCI/L)	URANIUM DIS-SOLVED, EXTRAC-TION (UG/L)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)
AUG 07...	580	14	370	13	350	.16	1.6	7.3	35	.02	0

DATE	PCB, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ALDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	CHLOR-DANE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDD, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDT, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DI-AZINON, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DI-ELDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ENDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ETHION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	HEPTA-CHLOR, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)
AUG 07...	0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0

DATE	HEPTA-CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	MALA-THION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	METHYL PARA-THION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRI-THION, TOT. IN BOTTOM MATL. (UG/KG)	PARA-THION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	TOXA-PHENE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	TRI-THION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	2,4-D, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	2,4,5-T TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	SILVEX, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)
AUG 07...	.0	.0	.0	.0	.0	.0	0	.0	0	0	.0

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1											---	---
2											---	---
3											---	---
4											---	---
5											---	---
6											1400	1250
7											1380	---
8											---	---
9											---	---
10											1320	---
11											---	---
12											---	---
13											---	1320
14											---	---
15											1350	---
16											1300	---
17											1230	---
18											---	---
19											---	---
20											---	---
21											---	---
22											1190	---
23											---	---
24											---	---
25											---	---
26											---	---
27											---	---
28											---	---
29											---	---
30											---	---
31											---	---

09306042 PICEANCE CREEK TRIBUTARY NEAR RIO BLANCO, CO--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1							---	---	---	---	---	---
2							---	---	---	---	---	---
3							---	---	---	---	---	---
4							---	---	---	---	---	---
5							---	---	---	---	---	---
6							---	---	19.5	16.5	30.0	7.0
7							---	---	26.5	11.5	---	---
8							---	---	---	---	---	---
9							---	---	---	---	---	---
10							---	---	---	10.0	---	---
11							---	---	24.0	8.5	---	---
12							---	---	---	---	---	---
13							---	---	---	---	23.0	7.5
14							---	---	---	---	---	---
15							---	---	18.5	17.5	---	---
16							---	---	21.5	17.0	---	---
17							---	---	20.5	12.5	---	---
18							---	---	---	---	---	---
19							---	---	---	---	---	---
20							---	---	---	---	---	---
21							---	---	---	---	---	---
22							---	---	25.0	13.5	---	---
23							---	---	---	---	---	---
24							---	---	---	---	---	---
25							---	---	---	---	---	---
26							---	---	---	---	---	---
27							---	---	---	---	---	---
28							---	---	---	---	---	---
29							---	---	29.0	11.0	---	---
30							---	---	18.0	8.5	---	---
31							29.0	27.5	25.5	22.0	---	---

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JULY			AUGUST			SEPTEMBER	
1	.00		---	.00	---	---	.00	---	---
2	.00		---	.00	---	---	.00	---	---
3	.00		---	.00	---	---	.00	---	---
4	.00		---	.00	---	---	.00	---	---
5	.00		---	.00	---	---	.00	---	---
6	.00		---	.11	5170	3.8	.04	5940	5.0
7	.00		---	.10	10900	4.0	.00	---	---
8	.00		---	.00	---	---	.00	---	---
9	.00		---	.00	---	---	.00	---	---
10	.00		---	.01	2980	.76	.00	---	---
11	.00		---	.02	6620	1.3	.00	---	---
12	.00		---	.00	---	---	.00	---	---
13	.00		---	.00	---	---	.10	6070	3.3
14	.00		---	.00	---	---	.00	---	---
15	.00		---	.04	2980	3.2	.00	---	---
16	.00		---	.20	6100	17	.00	---	---
17	.00		---	.01	---	.75	.00	---	---
18	.00		---	.00	---	---	.00	---	---
19	.00		---	.00	---	---	.00	---	---
20	.00		---	.00	---	---	.00	---	---
21	.00		---	.00	---	---	.00	---	---
22	.00		---	.18	2850	6.8	.00	---	---
23	.00		---	.00	---	---	.00	---	---
24	.00		---	.00	---	---	.00	---	---
25	.00		---	.00	---	---	.00	---	---
26	.00		---	.00	---	---	.00	---	---
27	.00		---	.00	---	---	.00	---	---
28	.00		---	.00	---	---	.00	---	---
29	.00		---	.15	8880	7.7	.00	---	---
30	.00		---	.25	12200	18	.00	---	---
31	.07		5.0	.05	10400	3.9	---	---	---
TOTAL	0.07		5.0	1.12	---	67.21	0.14	---	8.3
YEAR	1.33		80.51						

09306050 SCANDARD GULCH NEAR RIO BLANCO, CO

LOCATION.--Lat 39°47'38", long 108°13'40", in NE¼NW¼ sec.13, T.3 S., R.97 W., Rio Blanco County, Hydrologic Unit 14050006, on left bank 50 ft (15 m) downstream from Little Scandard Gulch and 15.8 mi (25.4 km) west of Rio Blanco.

DRAINAGE AREA.--6.61 mi² (17.12 km²), revised.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1974 to September 1976, March 1978 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 6,646 ft (2,025.7 m), from topographic map.

REMARKS.--Records excellent.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11 ft³/s (0.31 m³/s) July 29, 1978, gage height, 1.74 ft (0.530 m); no flow most of each year.

EXTREMES FOR CURRENT YEAR.--No flow entire year.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1974 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1974 to current year.
WATER TEMPERATURE: April 1974 to current year.
SUSPENDED-SEDIMENT DISCHARGE: April 1974 to current year.

INSTRUMENTATION.--Water-quality monitor since April 1974. Automatic pumping sediment sampler since April 1974.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SEDIMENT CONCENTRATIONS: Maximum daily, 1,400 mg/L Mar. 5, 1975; no flow on many days each year.
SEDIMENT LOADS: Maximum daily, 8.0 tons, estimated (7.0 t) Mar. 17, 1976; no flow many days each year.

EXTREMES FOR CURRENT YEAR.--No flow entire year.

09306052 SCANDARD GULCH AT MOUTH, NEAR RIO BLANCO, CO

LOCATION.--Lat 39°48'51", long 108°14'35", in SW¼SE¼ sec.2, T.3 S., R.97 W., Rio Blanco County, Hydrologic Unit 14050006, on right bank 2,100 ft (640 m) upstream from mouth and 16.8 mi (27.0 km) west of Rio Blanco.

DRAINAGE AREA.--7.97 mi^2 (20.64 km^2), revised.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1974 to September 1976, November 1977 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 6,434 ft (1,961.1 m), from topographic map.

REMARKS.--Records excellent except for days of flow which are good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6.0 ft^3/s (0.17 m^3/s) July 29, 1978, gage height, 1.18 ft (0.360 m); maximum gage height, 1.65 ft (0.503 m), Mar. 4, 1975 (backwater from ice); no flow most days of each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4.6 ft^3/s (0.13 m^3/s) Mar. 13, gage height, 1.14 ft (0.347 m); no flow most of year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

MAR 8	0.38	MAR 13	0.79	MAR 16	0.11

CAL YR 1978	TOTAL 0.38	MEAN 0.001	MAX 0.38	MIN 0.00	AC-FT 0.8
WTR YR 1979	TOTAL 1.28	MEAN .003	MAX .79	MIN .00	AC-FT 2.5

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1974 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1974 to current year.
WATER TEMPERATURE: April 1974 to current year.
SUSPENDED SEDIMENT DISCHARGE: April 1974 to current year.

INSTRUMENTATION.--Water-quality monitor since April 1974. Automatic pumping sediment sampler since April 1974.

REMARKS.--Flow only on days shown. No water-quality data available for current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 425 micromhos Mar. 18, 1976; minimum, 147 micromhos July 29, 1978.
WATER TEMPERATURES: Maximum, 22.0°C July 29, 1978; minimum, 0.5°C Feb. 11, 12, 1976.
SEDIMENT CONCENTRATIONS: Maximum daily, 49,000 mg/L July 29, 1978; no flow many days each year.
SEDIMENT LOADS: Maximum daily, 50 tons (45 t) estimated July 29, 1978.

09306058 WILLOW CREEK NEAR RIO BLANCO, CO

LOCATION.--Lat 39°50'14", long 108°14'37", in NW¼NE¼ sec.35, T.2 S., R.97 W., Rio Blanco County, Hydrologic Unit 14050006, on right bank 1,500 ft (460 m) upstream from mouth and 17.4 mi (28.0 km) west of Rio Blanco.

DRAINAGE AREA.--48.4 mi² (125.4 km²), revised.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1974 to current year.

GAGE.--Water-stage recorder. Concrete control since Aug. 9, 1974. Altitude of gage is 6,273 ft (1,912 m), from topographic map.

REMARKS.--Records good except those for winter period, which are fair. Diversions above station for irrigation of about 315 acres (1.27 km²).

AVERAGE DISCHARGE.--5 years, 1.61 ft³/s (0.046 m³/s), 1,170 acre-ft/yr (1.44 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 23 ft³/s (0.65 m³/s) Sept. 3, 1977, gage height, 4.46 ft (1.359 m); no flow for many days in 1978, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5.4 ft³/s (0.15 m³/s) at 1100 July 25, gage height, 3.26 ft (0.994 m); maximum gage height, 3.89 ft (1.186 m), Jan. 30 (backwater from ice); no flow Apr. 27, 28, 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.98	.95	1.4	.85	1.1	1.6	2.5	.01	.45	.97	3.4	2.5
2	.94	.94	1.3	1.0	1.1	1.6	2.4	.05	.38	.39	3.9	3.0
3	.90	1.0	1.3	1.0	1.0	1.7	2.3	.04	.36	.12	2.0	3.7
4	.86	1.0	1.3	1.2	1.1	1.7	2.3	.04	.43	.14	1.1	2.3
5	.82	1.0	1.3	1.0	1.1	1.7	2.3	.03	.57	.20	1.4	2.2
6	.78	1.1	1.3	1.1	1.1	1.7	2.2	.11	.73	.50	1.4	2.2
7	.82	1.2	1.3	1.1	1.1	1.7	2.3	.13	.64	.58	1.7	2.1
8	.86	1.1	1.3	1.3	1.0	1.7	2.2	.63	.47	.62	1.4	2.7
9	.80	1.2	1.3	1.1	.97	1.7	2.2	.59	.61	.78	1.3	2.5
10	.80	1.2	1.2	1.2	1.0	1.7	2.7	.21	.45	.82	1.4	1.7
11	.84	.91	1.2	1.3	1.0	1.7	2.7	.22	.50	.88	1.7	1.7
12	.87	1.4	1.2	1.2	1.2	1.7	3.0	.24	.65	.98	1.8	1.7
13	.87	1.1	1.2	1.2	1.2	1.7	3.0	.11	.86	1.1	1.7	1.7
14	.90	1.4	1.1	1.2	1.5	1.7	2.9	.07	.94	1.1	1.5	1.5
15	.90	1.4	1.1	1.2	1.5	1.8	2.5	.07	1.3	.55	1.8	1.3
16	.89	1.4	1.2	1.2	1.6	2.5	1.0	.08	1.5	.45	2.2	1.2
17	.89	1.3	1.3	1.1	1.6	2.8	.08	.07	1.2	.45	2.4	1.1
18	.85	1.4	1.3	1.1	1.6	2.9	.05	.12	.74	.44	2.3	1.1
19	.78	1.4	1.3	1.0	1.6	2.9	.29	.06	.65	.42	2.3	1.0
20	.81	1.4	1.2	1.1	1.6	3.0	.35	.09	1.3	.45	2.7	.98
21	.88	1.4	1.1	1.0	1.6	2.9	.32	.09	1.2	.49	2.8	.91
22	.87	1.4	1.1	1.1	1.6	2.2	.47	.08	1.5	.55	2.5	.95
23	.83	1.4	1.1	1.1	1.6	2.2	.27	.08	2.0	.93	2.5	2.3
24	.91	1.4	1.1	1.1	1.6	2.3	.13	.30	1.7	3.3	2.5	2.0
25	.87	1.4	1.1	1.1	1.6	1.9	.13	.58	1.7	3.5	2.5	2.7
26	.86	1.5	1.1	1.1	1.6	1.9	.11	.30	2.2	2.9	2.3	2.2
27	.82	1.4	1.1	1.1	1.6	2.1	.00	.34	2.3	3.2	2.3	2.2
28	.82	1.4	1.1	1.1	1.6	2.2	.00	.72	1.8	3.1	2.7	2.3
29	.82	1.4	1.1	1.1	---	2.2	.09	.79	.89	3.1	2.8	2.3
30	.85	1.4	1.1	1.1	---	2.1	.00	.69	.89	3.2	2.7	2.3
31	.92	---	.97	1.1	---	2.3	---	.57	---	3.2	2.6	---
TOTAL	26.61	37.90	37.07	34.45	37.77	63.8	40.79	7.51	30.91	39.41	67.6	58.34
MEAN	.86	1.26	1.20	1.11	1.35	2.06	1.36	.24	1.03	1.27	2.18	1.94
MAX	.98	1.5	1.4	1.3	1.6	3.0	3.0	.79	2.3	3.5	3.9	3.7
MIN	.78	.91	.97	.85	.97	1.6	.00	.01	.36	.12	1.1	.91
AC-FT	53	75	74	68	75	127	81	15	61	78	134	116

CAL YR 1978 TOTAL 337.15 MEAN .92 MAX 2.4 MIN .00 AC-FT 669
WTR YR 1979 TOTAL 482.16 MEAN 1.32 MAX 3.9 MIN .00 AC-FT 956

09306058 WILLOW CREEK NEAR RIO BLANCO, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1974 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: November 1974 to current year.
pH: March 1976 to current year.
DISSOLVED OXYGEN: March 1976 to current year.
WATER TEMPERATURE: November 1974 to current year.
SUSPENDED-SEDIMENT DISCHARGE: October 1974 to current year.

INSTRUMENTATION.--Water-quality monitor since November 1974. Pumping sediment sampler since October 1974.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 1,920 micromhos July 14, 1976; minimum, 528 micromhos Mar. 18, 1975.
WATER TEMPERATURES: Maximum, 30.0°C July 17, 1976; minimum, 0.0°C on many days during winter months each year.
DISSOLVED OXYGEN: Maximum, 12.9 mg/L Mar. 29, 1979; minimum, 3.6 mg/L Sept. 29, 1978.
pH: Maximum, 8.7 units Aug. 10, 1977, July 17, 1979; minimum, 7.6 units Dec. 6, 1976, Jan. 2, 1977.
SEDIMENT CONCENTRATIONS: Maximum daily, 7,030 mg/L July 29, 1979; no flow many days during 1978.
SEDIMENT LOADS: Maximum daily, 61 tons (55 t) July 29, 30, 1979; no flow many days during 1978.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 1,480 micromhos Aug. 22; minimum, 1,050 micromhos Dec. 5.
WATER TEMPERATURES: Maximum, 24.0°C June 29; minimum, 0.0°C on many days during October to May.
pH: Maximum, 8.7 units Mar. 29; minimum, 7.7 units Mar. 24.
DISSOLVED OXYGEN: Maximum, 12.9 mg/L July 17; minimum, 6.2 mg/L Nov. 27.
SEDIMENT CONCENTRATIONS: Maximum daily, 7,030 mg/L July 29; minimum daily, 3 mg/L July 6.
SEDIMENT LOADS: Maximum daily, 61 tons (55 t) July 29, 30; minimum daily, 0.005 ton (0.005 t) many days during year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)
OCT											
25...	1245	.78	1400	8.0	6.5	2	--	6.4	490	0	400
NOV											
03...	1030	E.99	1280	8.4	5.0	--	--	10.8	550	--	451
15...	1100	1.3	1320	8.5	1.0	7	--	11.2	500	0	410
DEC											
05...	1300	E1.2	1050	7.8	.0	--	--	9.4	--	0	--
JAN											
18...	1330	1.1	1300	8.0	3.0	7	--	10.6	500	0	410
FEB											
07...	1145	E1.0	1250	8.3	1.5	--	--	10.7	560	--	--
21...	1330	E1.3	1200	8.4	5.0	4	--	9.0	380	39	380
MAR											
13...	1100	E1.6	1250	8.1	5.5	--	22	10.1	550	0	451
APR											
04...	1305	2.1	1400	8.4	11.0	20	--	9.2	470	0	390
25...	1040	E.23	1280	8.3	14.0	--	--	10.6	450	--	--
MAY											
30...	1100	E.72	1450	8.0	13.0	10	--	8.8	490	0	400
JUN											
19...	1345	E.50	1400	8.4	11.5	5	--	--	520	0	430
JUL											
12...	1115	E.93	1450	8.1	15.5	--	20	11.5	540	0	443
17...	1250	.48	1350	7.9	21.5	0	--	12.0	470	0	390
AUG											
22...	0900	2.7	1250	8.1	8.0	15	--	9.7	510	0	420
22...	1045	2.7	1480	8.1	12.0	15	--	8.5	463	0	380
SEP											
04...	1130	E2.1	1380	8.2	13.5	--	3.0	8.9	560	--	--
21...	1100	E.97	1470	8.2	11.5	5	--	9.7	--	--	--
27...	1050	E2.2	1370	8.3	10.5	--	--	8.8	590	--	--

E ESTIMATED.

09306058 WILLOW CREEK NEAR RIO BLANCO, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L)	COLI- FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, (COLS. PER 100 ML)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)
OCT										
25...	1245	--	--	--	--	510	110	84	73	120
NOV										
15...	1100	--	--	--	--	560	150	99	76	120
DEC										
05...	1300	8	--	K12	400	--	--	--	--	--
JAN										
18...	1330	--	--	--	--	510	100	86	72	110
FEB										
21...	1330	--	--	--	--	520	140	91	70	120
APR										
04...	1305	--	--	--	--	500	120	84	71	130
MAY										
30...	1100	15	200	100	100	550	150	90	78	120
JUN										
19...	1345	--	--	--	--	550	120	95	75	140
JUL										
17...	1250	20	K320	84	520	490	110	69	77	130
AUG										
22...	0900	--	--	--	--	510	95	87	72	120
22...	1045	--	--	--	--	540	160	92	75	130
SEP										
21...	1100	15	K130	150	130	590	130	100	82	140

DATE	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	BROMIDE DIS- SOLVED (MG/L AS BR)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)
OCT										
25...	2.3	2.0	--	350	14	.4	--	16	902	.11
NOV										
15...	2.2	1.8	--	420	10	.3	--	15	989	.11
DEC										
05...	--	2.5	.0	--	--	--	.2	--	--	--
JAN										
18...	2.1	1.7	--	330	14	.4	--	16	878	.20
FEB										
21...	2.3	1.8	--	340	11	.3	--	15	877	.13
APR										
04...	2.5	1.6	--	360	.0	.4	--	15	894	.05
MAY										
30...	2.2	1.9	--	350	12	.4	.1	13	909	.11
JUN										
19...	2.6	2.1	--	350	10	.4	--	15	945	.16
JUL										
17...	2.6	2.4	.0	390	11	.4	.1	14	929	.00
AUG										
22...	2.3	1.2	--	390	6.3	.2	--	17	950	--
22...	2.4	2.5	--	390	12	.4	--	18	950	--
SEP										
21...	2.5	2.1	.0	410	11	.4	.1	19	1050	.27

K BASED ON NON-IDEAL COLONY COUNT.

09306058 WILLOW CREEK NEAR RIO BLANCO, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)
OCT										
25...	.01	.12	.14	.08	.00	.31	.54	.39	.54	.04
NOV										
15...	.01	.12	.13	.04	.02	.20	.21	.24	.23	.01
DEC										
05...	--	--	--	--	--	--	--	--	--	--
JAN										
18...	.02	.22	.24	.00	.00	.63	.54	.63	.54	.09
FEB										
21...	.02	.15	.17	.07	.12	.51	.35	.58	.47	.09
APR										
04...	.02	.07	.07	.01	.00	.20	.05	.21	.05	.04
MAY										
30...	.02	.13	.18	.04	.00	.15	.30	.19	.30	.07
JUN										
19...	.02	.18	.16	.01	.00	.29	.14	.30	.14	.01
JUL										
17...	.00	.00	.03	.02	.01	.25	.29	.27	.30	.02
AUG										
22...	--	--	1.0	--	.00	--	.21	--	.21	.01
22...	.00	--	.33	.00	.00	.70	.52	.70	.52	.05
SEP										
21...	.02	.29	.28	.04	.01	.34	.40	.38	.41	.01

DATE	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	ARSENIC DIS-SOLVED (UG/L AS AS)	BORON, DIS-SOLVED (UG/L AS B)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)
OCT									
25...	.04	.01	0	130	10	0	5.3	1.1	.00
NOV									
15...	.01	.01	1	140	30	0	8.7	--	.10
DEC									
05...	--	--	--	--	--	--	--	--	--
JAN									
18...	.01	.00	1	110	10	9	6.0	1.2	.00
FEB									
21...	.02	.02	1	110	20	0	5.8	1.3	.00
APR									
04...	.01	.00	1	120	40	10	7.0	2.3	.00
MAY									
30...	.00	.00	2	120	10	20	6.3	--	--
JUN									
19...	.03	.03	6	150	10	10	6.2	.4	.00
JUL									
17...	.00	.04	4	160	10	5	36	--	.00
AUG									
22...	--	.00	1	100	10	2	6.5	.9	--
22...	.03	.01	1	150	20	20	9.5	.4	.00
SEP									
21...	.01	.01	1	130	<10	10	6.0	.1	.00

09306058 WILLOW CREEK NEAR RIO BLANCO, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	BARIUM, DISSOLVED (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
DEC 05...	20	--	--	60	--	<1	--	10	--	--
MAY 30...	0	2	100	0	0	0	10	0	0	9
JUL 17...	20	--	--	70	--	<1	--	0	--	--
SEP 21...	0	2	100	70	0	<1	0	10	0	0

DATE	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	LITHIUM DISSOLVED (UG/L AS LI)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)
DEC 05...	5	--	--	8	10	--	--	.1	--
MAY 30...	0	730	12	8	0	40	1.9	1.3	3
JUL 17...	2	--	--	0	7	--	--	.1	--
SEP 21...	2	150	7	0	10	30	.0	.0	2

DATE	MOLYBDENUM, DISSOLVED (UG/L AS MO)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	STRONTIUM, DISSOLVED (UG/L AS SR)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)	GROSS ALPHA, DISSOLVED (UG/L AS U-NAT)
DEC 05...	2	--	--	1	--	2900	--	60	<8.5
MAY 30...	3	3	1	1	0	1200	30	20	<15
JUL 17...	12	--	--	1	--	3100	--	<3	<14
SEP 21...	<10	3	1	1	0	3600	0	<3	<17

DATE	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DISSOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DISSOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	RADIUM 226, DISSOLVED, RADON METHOD (PCI/L)	URANIUM DISSOLVED, EXTRACTION (UG/L)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)
DEC 05...	.9	<2.6	.8	<2.3	.7	.04	2.3	.00	0
MAY 30...	2.4	12	2.0	11	1.8	.06	2.4	.00	3
JUL 17...	<.4	<5.3	<.4	<4.9	<.4	.04	2.8	.00	0
SEP 21...	<.4	8.9	.4	9.1	.5	.06	2.7	.00	0

09306058 WILLOW CREEK NEAR RIO BLANCO, CO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	1220	1200			---	1290				---	1350
2	---	1220	---			---	---				---	1350
3	---	1230	---			---	---				---	1340
4	1320	1230	---			---	---				1340	1360
5	1330	1230	---			---	---				1380	1370
6	1330	1230	---			---	---				1380	1370
7	1330	1230	---			---	---				1350	1360
8	1330	1230	---			---	---				1370	1350
9	1330	1230	---			---	---				1390	1350
10	1330	1220	---			---	---				1380	1350
11	1330	1210	---			---	---				1370	1320
12	1330	---	---			---	---				1380	1320
13	1330	1220	---			---	---				1380	1330
14	1340	1230	---			---	---				1390	1340
15	1340	---	---			---	---				1380	1340
16	1330	1230	---			---	---				1380	1340
17	1340	1270	---			---	---				1380	1370
18	1340	1250	---			---	---				1380	1400
19	1340	1330	---			---	---				1380	1410
20	1360	1330	---			---	---				1370	---
21	1350	1370	---			---	---				1380	1410
22	1340	1240	---			1310	---				1380	1410
23	1340	1300	---			1330	---				1380	1400
24	---	1310	---			1320	---				1380	1380
25	---	1260	---			---	---				1370	1370
26	1230	1260	---			---	---				1370	1370
27	1230	1300	---			1290	---				1370	---
28	1230	1330	---			---	---				1370	---
29	1240	1270	---			1290	---				1360	---
30	1230	1260	---			---	---				1360	---
31	1230	---	---			1300	---				1360	---

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	9.5	1.5	3.5	.0					---	---
2	---	---	12.0	2.5	.0	.0					---	---
3	---	---	11.0	3.5	---	---					---	---
4	14.0	1.5	9.5	1.0	---	---					---	---
5	14.0	2.0	9.5	2.5	---	---					---	---
6	12.5	3.0	7.5	.0	---	---					---	---
7	14.5	3.0	8.0	.0	---	---					---	---
8	14.5	3.0	9.0	.5	---	---					---	---
9	14.5	3.5	9.5	1.0	---	---					---	---
10	14.5	3.5	4.5	.0	---	---					---	---
11	12.0	1.5	1.5	.0	---	---					---	---
12	12.5	1.0	---	---	---	---					---	---
13	13.0	1.5	3.0	1.5	---	---					---	---
14	11.5	2.0	3.5	.5	---	---					---	---
15	10.0	3.0	3.0	1.0	---	---					---	---
16	12.5	7.0	4.5	.5	---	---					---	---
17	13.5	2.5	3.5	.0	---	---					---	---
18	9.0	3.5	3.0	.0	---	---					---	---
19	9.5	7.0	8.5	1.5	---	---					---	---
20	8.0	6.0	4.5	.5	---	---					---	---
21	10.5	1.0	6.0	.0	---	---					---	---
22	9.0	1.5	5.5	.5	---	---					8.0	1.0
23	6.5	4.5	4.0	.0	---	---					13.0	.0
24	---	---	2.5	.0	---	---					14.0	.0
25	---	---	4.5	.0	---	---					---	---
26	8.5	3.5	4.0	.0	---	---					---	---
27	9.5	.0	4.5	.0	---	---					8.5	3.0
28	10.0	.5	1.0	.0	---	---					---	---
29	10.0	1.0	2.5	.0	---	---					9.0	5.0
30	7.5	2.0	6.0	1.0	---	---					---	---
31	9.5	1.0	---	---	---	---					8.5	2.0

09306058 WILLOW CREEK NEAR RIO BLANCO, CO--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	13.0	4.0	---	---	---	---	20.0	9.5	18.0	8.5	16.0	9.5
2	11.5	.5	---	---	---	---	22.5	8.5	18.0	9.0	16.0	10.0
3	12.5	.0	---	---	---	---	19.5	9.0	19.5	9.0	16.5	10.0
4	11.5	.0	---	---	---	---	19.5	7.5	19.0	9.5	15.5	10.0
5	17.0	3.0	21.5	3.0	---	---	23.0	7.0	19.5	11.5	15.5	9.0
6	17.5	2.0	18.5	2.5	---	---	15.5	8.5	18.5	12.0	15.5	9.5
7	---	---	5.5	1.5	---	---	19.5	8.5	19.0	12.0	14.5	10.0
8	---	---	12.5	.0	---	---	17.5	9.0	19.0	13.0	14.5	10.0
9	---	---	14.0	3.0	---	---	18.5	9.0	18.5	11.5	14.5	10.5
10	6.5	1.5	16.0	2.5	---	---	18.0	9.5	19.5	11.0	15.0	11.0
11	6.5	.0	15.5	1.0	---	---	18.5	9.5	19.0	10.5	14.0	10.0
12	12.0	.5	22.0	3.0	---	---	19.0	9.5	17.5	11.5	14.5	8.5
13	13.5	.0	---	---	---	---	18.0	10.5	17.0	12.0	13.5	8.5
14	---	---	---	---	---	---	19.5	11.0	13.0	11.0	14.0	8.0
15	---	---	21.0	7.0	---	---	20.0	10.0	14.0	10.5	14.0	7.0
16	17.5	5.0	20.0	5.5	---	---	23.0	9.5	14.5	11.0	15.0	7.5
17	---	---	---	---	15.5	6.5	22.0	9.5	13.5	10.0	15.0	7.5
18	---	---	---	---	---	---	23.0	9.5	13.0	10.0	14.5	7.5
19	19.5	2.5	---	---	16.0	13.0	19.5	8.0	14.0	10.5	14.5	8.0
20	20.5	2.5	---	---	20.0	6.0	17.0	8.5	12.5	10.5	---	---
21	19.0	1.5	---	---	21.0	7.0	18.5	9.0	15.5	9.5	14.0	9.5
22	15.5	3.5	---	---	21.5	7.0	17.0	9.5	16.5	9.5	13.5	8.5
23	---	---	---	---	19.0	12.0	18.0	9.5	17.0	10.0	13.5	8.5
24	---	---	17.5	11.0	20.0	12.0	17.5	11.5	17.0	10.5	15.0	7.5
25	20.5	3.0	19.5	10.0	21.5	14.0	18.5	10.5	16.5	10.5	14.0	8.5
26	---	---	---	---	21.0	9.5	16.5	10.0	16.0	10.0	16.0	9.0
27	---	---	---	---	19.5	10.0	17.5	10.0	16.0	10.0	---	---
28	---	---	---	---	18.5	9.5	18.5	10.0	16.5	11.0	---	---
29	---	---	15.5	10.0	24.0	8.0	18.0	10.0	16.5	10.0	---	---
30	---	---	18.5	9.5	20.0	9.5	17.5	8.5	14.0	10.5	---	---
31	---	---	18.0	8.5	---	---	18.0	8.5	16.0	10.5	---	---

PH (UNITS), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	8.1	8.1			---	8.1			---	8.3	8.1
2	---	8.0	8.1			---	---			---	8.3	8.1
3	---	8.0	---			---	---			---	8.3	8.1
4	8.1	8.0	---			---	---			---	8.3	8.1
5	8.1	8.0	---			---	---			---	8.2	8.1
6	8.1	8.0	---			---	---			---	8.2	8.1
7	8.1	8.0	---			---	---			---	8.2	8.1
8	8.1	8.0	---			---	---			---	8.2	8.1
9	8.1	8.0	---			---	---			---	8.2	8.1
10	8.1	8.0	---			---	---			---	8.2	8.1
11	8.1	8.0	---			---	---			---	8.2	8.1
12	8.0	---	---			---	---			---	8.2	8.1
13	8.0	8.0	---			---	---			---	8.2	8.1
14	8.0	8.0	---			---	---			---	8.2	8.1
15	8.0	8.0	---			---	---			---	8.2	8.2
16	8.0	8.3	---			---	---			---	8.1	8.2
17	8.0	8.3	---			---	---			---	8.2	8.2
18	8.0	8.3	---			---	---			---	8.2	8.2
19	8.0	8.2	---			---	---			---	8.1	8.2
20	7.9	8.2	---			---	---			---	8.1	---
21	8.0	8.1	---			---	---			---	8.1	8.2
22	8.0	8.3	---			8.2	---			---	8.1	8.2
23	8.0	8.2	---			8.0	---			---	8.1	8.2
24	---	8.2	---			7.9	---			---	8.1	8.2
25	---	8.2	---			---	---			---	8.1	8.2
26	8.1	8.2	---			---	---			---	8.1	8.2
27	8.1	8.2	---			8.3	---			---	8.1	---
28	8.1	8.2	---			---	---			8.3	8.1	---
29	8.1	8.2	---			8.2	---			8.3	8.1	---
30	8.1	8.2	---			---	---			8.3	8.1	---
31	8.1	---	---			8.5	---			8.3	8.1	---

09306058 WILLOW CREEK NEAR RIO BLANCO, CO--Continued

DISSOLVED OXYGEN (DO), MG/L, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1			---	---	10.5	10.0					---	---
2			---	---	---	---					---	---
3			---	---	---	---					---	---
4			---	---	---	---					---	---
5			---	---	---	---					---	---
6			---	---	---	---					---	---
7			---	---	---	---					---	---
8			4.6	---	---	---					---	---
9			5.1	---	---	---					---	---
10			---	---	---	---					---	---
11			---	---	---	---					---	---
12			---	---	---	---					---	---
13			---	---	---	---					---	---
14			---	---	---	---					---	---
15			---	---	---	---					---	---
16			---	---	---	---					---	---
17			---	---	---	---					---	---
18			---	---	---	---					---	---
19			---	---	---	---					---	---
20			---	---	---	---					---	---
21			---	---	---	---					---	---
22			---	---	---	---					10.2	9.0
23			10.9	10.1	---	---					9.9	8.5
24			10.7	9.9	---	---					---	---
25			10.7	9.9	---	---					---	---
26			10.3	7.5	---	---					---	---
27			10.4	6.2	---	---					10.2	9.2
28			10.6	9.6	---	---					---	---
29			10.7	9.7	---	---					---	---
30			---	---	---	---					---	---
31			---	---	---	---					---	---

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---			---	---	10.1	8.2	9.3	7.7	8.9	7.1
2	10.1	9.3			---	---	10.9	7.5	9.2	7.6	9.1	7.1
3	10.4	9.0			---	---	11.5	7.7	9.2	7.3	8.9	7.0
4	10.2	9.0			---	---	10.4	7.6	8.3	7.1	9.2	7.3
5	10.3	8.4			---	---	9.6	7.7	7.8	7.0	9.2	7.1
6	10.3	8.3			---	---	9.5	7.8	7.8	7.1	9.1	7.2
7	---	---			---	---	9.6	7.6	7.7	6.5	9.2	7.2
8	---	---			---	---	10.4	7.5	7.9	6.9	9.1	7.1
9	---	---			---	---	10.7	7.3	7.9	6.8	8.9	7.0
10	9.7	8.9			---	---	11.3	7.3	7.7	6.8	9.4	7.2
11	9.9	8.5			---	---	11.7	7.2	7.8	6.7	9.3	7.3
12	10.1	7.6			---	---	11.7	7.0	8.0	6.6	9.5	7.5
13	10.6	7.8			---	---	11.5	6.7	8.2	6.7	9.7	7.7
14	---	---			---	---	11.1	6.9	8.6	6.9	9.8	7.8
15	---	---			---	---	11.8	7.0	8.2	7.0	10.0	7.8
16	9.2	7.8			---	---	12.7	7.0	7.9	7.0	10.0	7.7
17	---	---			---	---	12.9	7.3	8.7	7.5	10.0	7.6
18	---	---			---	---	12.6	8.0	9.0	7.5	10.1	7.7
19	10.0	7.8			---	---	11.8	8.0	8.6	7.6	10.2	8.0
20	10.0	7.6			---	---	11.2	8.0	8.5	7.5	---	---
21	10.6	8.9			---	---	11.4	7.7	8.5	7.4	9.8	7.7
22	10.2	8.9			---	---	11.1	7.9	8.6	7.2	9.9	7.7
23	---	---			---	---	11.3	7.5	8.6	7.0	8.9	7.4
24	---	---			---	---	9.0	7.4	8.6	7.0	9.2	7.6
25	---	---			---	---	8.9	7.6	8.7	7.1	9.2	7.6
26	---	---			9.5	7.9	9.0	8.0	8.7	7.1	9.2	8.1
27	---	---			9.7	7.9	9.1	7.9	8.9	7.0	---	---
28	---	---			9.9	8.2	9.1	7.9	8.7	6.9	---	---
29	---	---			10.1	8.0	9.1	7.8	8.7	7.1	---	---
30	---	---			10.1	8.0	9.3	7.8	9.1	7.2	---	---
31	---	---			---	---	9.3	7.8	8.9	7.1	---	---

09306058 WILLOW CREEK NEAR RIO BLANCO, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	.98	26	.07	.95	46	.12	1.4	59	.22
2	.94	38	.10	.94	28	.07	1.3	37	.13
3	.90	25	.06	1.0	18	.05	1.3	30	.11
4	.86	38	.09	1.0	27	.07	1.3	176	.62
5	.82	25	.06	1.0	70	.19	1.3	12	.04
6	.78	48	.10	1.1	175	.52	1.3	29	.10
7	.82	154	.34	1.2	205	.66	1.3	43	.15
8	.86	25	.06	1.1	63	.19	1.3	---	.14
9	.80	44	.10	1.2	---	.36	1.3	---	.14
10	.80	47	.10	1.2	---	.36	1.2	---	.13
11	.84	25	.06	.91	---	.10	1.2	---	.13
12	.87	51	.12	1.4	135	.51	1.2	36	.12
13	.87	63	.15	1.1	---	.25	1.2	---	.27
14	.90	43	.10	1.4	---	.60	1.1	---	.20
15	.90	30	.07	1.4	58	.22	1.1	---	.20
16	.89	38	.09	1.4	---	.60	1.2	---	.27
17	.89	51	.12	1.3	205	.72	1.3	---	.35
18	.85	38	.09	1.4	---	.60	1.3	---	.35
19	.78	27	.06	1.4	---	.60	1.3	---	.35
20	.81	34	.07	1.4	---	.60	1.2	60	.19
21	.88	51	.12	1.4	---	.60	1.1	---	.20
22	.87	44	.10	1.4	---	.60	1.1	---	.20
23	.83	33	.07	1.4	---	.60	1.1	---	.20
24	.91	53	.13	1.4	---	.60	1.1	---	.20
25	.87	51	.12	1.4	---	.60	1.1	---	.20
26	.86	52	.12	1.5	---	.90	1.1	---	.20
27	.82	45	.10	1.4	---	.60	1.1	---	.20
28	.82	34	.08	1.4	---	.60	1.1	---	.20
29	.82	32	.07	1.4	105	.40	1.1	---	.20
30	.85	34	.08	1.4	85	.32	1.1	---	.20
31	.92	40	.10	---	---	---	.97	---	.14
TOTAL	26.61	---	3.10	37.90	---	13.21	37.07	---	6.35

09306058 WILLOW CREEK NEAR RIO BLANCO, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JANUARY			FEBRUARY			MARCH	
1	.85	---	.09	1.1	---	.20	1.6	---	.70
2	1.0	---	.15	1.1	---	.20	1.6	---	.70
3	1.0	---	.15	1.0	---	.15	1.7	---	.80
4	1.2	---	.27	1.1	---	.20	1.7	---	.90
5	1.0	---	.15	1.1	---	.25	1.7	---	.80
6	1.1	---	.20	1.1	---	.30	1.7	---	.80
7	1.1	---	.20	1.1	---	.40	1.7	---	1.0
8	1.3	---	.35	1.0	205	.55	1.7	---	.80
9	1.1	---	.20	.97	---	.50	1.7	---	.80
10	1.2	---	.27	1.0	---	.55	1.7	---	1.1
11	1.3	---	.35	1.0	---	.55	1.7	---	1.0
12	1.2	---	.27	1.2	---	.70	1.7	---	1.1
13	1.2	---	.27	1.2	---	.70	1.7	269	1.2
14	1.2	---	.27	1.5	---	.80	1.7	328	1.5
15	1.2	---	.27	1.5	---	.80	1.8	329	1.6
16	1.2	---	.27	1.6	---	.80	2.5	326	2.2
17	1.1	---	.20	1.6	---	.95	2.8	---	2.2
18	1.1	86	.26	1.6	---	.95	2.9	---	2.1
19	1.0	---	.15	1.6	---	.95	2.9	---	2.1
20	1.1	---	.20	1.6	---	.95	3.0	---	2.0
21	1.0	---	.15	1.6	218	.94	2.9	251	2.0
22	1.1	---	.20	1.6	---	.80	2.2	---	2.0
23	1.1	---	.20	1.6	---	.75	2.2	---	2.0
24	1.1	---	.20	1.6	---	.70	2.3	---	2.0
25	1.1	---	.20	1.6	---	.65	1.9	---	2.0
26	1.1	---	.20	1.6	---	.60	1.9	386	2.0
27	1.1	---	.20	1.6	117	.51	2.1	---	2.0
28	1.1	---	.20	1.6	---	.70	2.2	---	1.9
29	1.1	---	.20	---	---	---	2.2	318	1.9
30	1.1	---	.20	---	---	---	2.1	330	1.9
31	1.1	---	.20	---	---	---	2.3	425	2.6
TOTAL	34.45	---	6.69	37.77	---	17.10	63.8	---	47.70

09306058 WILLOW CREEK NEAR RIO BLANCO, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	2.5	240	1.6	.01	---	.00	.45	812	3.1
2	2.4	156	1.0	.05	---	.00	.38	164	.17
3	2.3	---	2.0	.04	17	.00	.36	92	.09
4	2.3	879	5.6	.04	13	.00	.43	133	.22
5	2.3	1270	8.4	.03	13	.00	.57	---	.30
6	2.2	180	1.1	.11	12	.00	.73	---	.40
7	2.3	190	1.2	.13	50	.02	.64	---	.40
8	2.2	245	1.5	.63	212	.38	.47	---	.20
9	2.2	1130	6.4	.59	112	.20	.61	---	.40
10	2.7	1830	14	.21	63	.03	.45	---	.20
11	2.7	2220	17	.22	64	.03	.50	---	.30
12	3.0	507	3.9	.24	7	.00	.65	---	.40
13	3.0	370	3.1	.11	---	.00	.86	---	.70
14	2.9	231	1.8	.07	---	.00	.94	410	1.0
15	2.5	2610	17	.07	11	.00	1.3	470	1.6
16	1.0	1120	6.8	.08	19	.00	1.5	120	.49
17	.08	---	.04	.07	14	.00	1.2	---	.30
18	.05	---	.04	.12	10	.00	.74	---	.30
19	.29	---	.50	.06	17	.00	.65	115	.27
20	.35	547	.57	.09	56	.01	1.3	203	.72
21	.32	73	.06	.09	13	.00	1.2	210	.68
22	.47	118	.14	.08	15	.00	1.5	---	.70
23	.27	114	.09	.08	14	.00	2.0	---	.90
24	.13	73	.04	.30	303	.34	1.7	---	.90
25	.13	248	.21	.58	667	1.1	1.7	230	1.1
26	.11	---	.05	.30	140	.11	2.2	235	1.4
27	.00	---	.00	.34	120	.11	2.3	255	1.6
28	.00	---	.00	.72	432	.96	1.8	170	.83
29	.09	68	.03	.79	1470	3.1	.89	45	.11
30	.00	---	.00	.69	595	1.1	.89	37	.09
31	---	---	---	.57	175	.27	---	---	---
TOTAL	40.79	---	94.17	7.51	---	7.76	30.91	---	19.87

09306058 WILLOW CREEK NEAR RIO BLANCO, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JULY			AUGUST			SEPTEMBER	
1	.97	24	.06	3.4	4980	47	2.5	---	.45
2	.39	19	.03	3.9	2740	29	3.0	---	.43
3	.12	5	.00	2.0	23	.14	3.7	---	.57
4	.14	10	.00	1.1	34	.09	2.3	---	.40
5	.20	6	.00	1.4	23	.09	2.2	---	.33
6	.50	3	.00	1.4	22	.09	2.2	55	.33
7	.58	5	.01	1.7	24	.11	2.1	98	.56
8	.62	6	.01	1.4	25	.09	2.7	84	.61
9	.79	36	.08	1.3	30	.10	2.5	---	.45
10	.82	62	.14	1.4	68	.27	1.7	---	.30
11	.88	---	.15	1.7	69	.32	1.7	---	.24
12	.98	---	.15	1.8	55	.26	1.7	---	.18
13	1.1	86	.27	1.7	24	.11	1.7	25	.11
14	1.1	70	.24	1.5	33	.14	1.5	33	.13
15	.55	39	.06	1.8	26	.13	1.3	25	.09
16	.45	27	.03	2.2	44	.26	1.2	---	.08
17	.45	64	.08	2.4	16	.10	1.1	---	.08
18	.44	64	.08	2.3	23	.14	1.1	100	.30
19	.42	42	.05	2.3	54	.35	1.0	---	.21
20	.45	47	.06	2.7	95	.71	.98	---	.12
21	.49	35	.05	2.8	52	.39	.91	30	.07
22	.55	49	.07	2.5	48	.32	.95	45	.12
23	.93	154	.45	2.5	48	.32	2.3	50	.44
24	3.3	167	1.5	2.5	44	.30	2.0	32	.17
25	3.5	307	2.9	2.5	44	.30	2.7	30	.22
26	2.9	237	2.0	2.3	---	.40	2.2	22	.13
27	3.2	120	1.0	2.3	---	.37	2.2	32	.19
28	3.1	230	1.9	2.7	---	.67	2.3	24	.15
29	3.1	7030	61	2.8	88	.67	2.3	22	.14
30	3.2	6820	61	2.7	---	.87	2.3	17	.11
31	3.2	4790	43	2.6	---	.76	---	---	---
TOTAL	39.41	---	176.37	67.6	---	84.87	58.34	---	7.71
YEAR	482.16		484.90						

09306061 PICEANCE CREEK ABOVE HUNTER CREEK, NEAR RIO BLANCO, CO

LOCATION.--Lat 39°51'02", long 108°15'30", in SE¼NE¼ sec.27, T.2 S., R.97 W., Rio Blanco County, Hydrologic Unit 14050006, on left bank 20 ft (6 m) downstream from private bridge, 0.4 mi (0.6 km) upstream from Hunter Creek, and 18.7 mi (30.1 km) west of Rio Blanco.

DRAINAGE AREA.--309 mi² (800 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1974 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,214 ft (1,894 m), from topographic map.

REMARKS.--Records good except those for winter period, which are fair. Diversions above station for irrigation above and below station.

AVERAGE DISCHARGE.--5 years, 16 ft³/s (0.453 m³/s), 11,590 acre-ft/yr (14.3 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 492 ft³/s (13.9 m³/s) Sept. 3, 1977, gage height, 4.19 ft (1.277 m); no flow Oct. 4, 5, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Sept. 3, 1977, exceeded all other floods at this location since at least 1939, from information by local resident.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 159 ft³/s (4.50 m³/s) at 0715 May 20, gage height, 2.50 ft (0.76 m); minimum daily, 0.52 ft³/s (0.015 m³/s) Oct. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.3	5.7	15	12	14	14	21	38	73	14	30	28
2	4.1	6.2	16	12	14	14	21	37	66	15	30	27
3	.52	6.5	16	12	14	15	22	50	65	17	28	22
4	.96	6.5	15	12	14	14	22	50	65	19	24	19
5	2.0	6.8	14	12	14	13	23	39	58	16	24	15
6	2.5	12	14	12	13	12	23	41	48	9.0	27	13
7	3.1	13	14	12	13	13	24	55	42	8.7	27	14
8	3.6	14	15	13	13	13	26	74	41	8.7	29	16
9	4.8	17	17	14	13	13	31	71	42	11	30	16
10	5.4	17	15	15	13	13	49	72	37	10	37	16
11	4.0	16	14	15	13	14	41	80	33	9.6	37	17
12	5.6	20	17	15	13	15	32	90	30	7.9	32	21
13	5.3	19	16	15	13	16	34	94	28	8.0	26	20
14	4.8	19	15	15	14	16	36	98	30	8.9	29	20
15	4.0	19	14	15	14	17	46	116	26	6.6	31	20
16	3.8	18	13	15	14	18	53	130	22	6.0	31	17
17	3.6	17	12	16	14	19	55	136	19	7.5	32	11
18	3.6	16	13	15	14	18	56	141	19	7.9	30	12
19	4.5	17	11	16	14	17	53	149	18	7.3	31	15
20	4.5	17	10	16	14	17	47	144	18	13	32	19
21	4.0	17	10	16	12	17	41	135	18	19	32	19
22	3.8	17	10	17	12	17	40	118	17	18	31	10
23	3.9	18	11	16	12	16	38	105	17	19	29	5.0
24	3.7	17	11	16	12	15	38	105	16	17	28	4.0
25	4.0	18	11	16	12	16	39	104	16	17	28	5.7
26	4.6	18	11	16	12	17	40	100	13	27	27	4.1
27	4.7	17	12	15	14	19	40	96	14	30	26	6.0
28	4.4	17	12	15	15	18	39	95	11	25	26	6.8
29	4.5	17	12	15	---	22	39	92	11	21	30	9.0
30	5.1	16	12	15	---	21	40	88	12	23	30	11
31	5.7	---	12	15	---	22	---	81	---	26	30	---
TOTAL	123.38	454.7	410	451	373	502	1109	2824	925	453.1	914	438.6
MEAN	3.98	15.2	13.2	14.5	13.3	16.2	37.0	91.1	30.8	14.6	29.5	14.6
MAX	5.7	20	17	17	15	22	56	149	73	30	37	28
MIN	.52	5.7	10	12	12	12	21	37	11	6.0	24	4.0
AC-FT	245	902	813	895	740	996	2200	5600	1830	899	1810	870

CAL YR 1978 TOTAL 4367.81 MEAN 12.0 MAX 60 MIN .15 AC-FT 8660
WTR YR 1979 TOTAL 8977.78 MEAN 24.6 MAX 149 MIN .52 AC-FT 17810

09306061 PICEANCE CREEK ABOVE HUNTER CREEK, NEAR RIO BLANCO, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1974 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1974 to current year.
WATER TEMPERATURE: October 1974 to current year.
SUSPENDED-SEDIMENT DISCHARGE: April 1974 to current year.

INSTRUMENTATION.--Automatic pumping sediment sampler since April 1974. Water-quality monitor since October 1974.

REMARKS.--Daily maximum and minimum specific-conductance data available in district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 1,980 micromhos Jan. 15, 1976; minimum, 550 micromhos Apr. 5, 1978.
WATER TEMPERATURES: Maximum, 26.5°C June 26, 1977; minimum, freezing point on many days during winter months.
DISSOLVED OXYGEN: Maximum, 16.5 mg/L Mar. 21, 22, 1976; minimum, 3.1 mg/L Sept. 10, 1978.
pH: Maximum, 8.9 units Dec. 7, 1977; minimum, 7.4 units Apr. 18, 1979.
SEDIMENT CONCENTRATIONS: Maximum daily, 87,000 mg/L, estimated Sept. 3, 1977; minimum daily, no flow Oct. 4, 5, 1977.
SEDIMENT LOADS: Maximum daily, 27,000 tons, (24,000 t), estimated Sept. 3, 1977; minimum daily, no flow Oct. 4, 5, 1977.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 1,630 micromhos Oct. 20, 25; minimum, 700 micromhos Apr. 18.
WATER TEMPERATURES: Maximum, 23.5°C July 18; minimum, 0.0°C Feb. 22, 23, 25.
DISSOLVED OXYGEN: Maximum, 11.7 mg/L July 7; minimum, 6.0 mg/L June 28, July 24, 25.
pH: Maximum, 8.7 units Feb. 11-13, 19; minimum, 7.4 units Apr. 18.
SEDIMENT CONCENTRATIONS: Maximum daily, 4,750 mg/L Apr. 10; minimum daily, 19 mg/L Sept. 25.
SEDIMENT LOADS: Maximum daily, 1,440 tons (1,310 t) May 17; minimum daily, 0.06 ton (0.05 t) Oct. 3.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)
OCT											
25...	1100	E4.0	1630	8.1	8.0	7	2.1	6.8	670	0	550
NOV											
03...	1100	E6.5	1500	8.2	9.0	--	7.0	9.9	670	--	--
14...	1300	E19	1320	8.5	3.0	10	--	9.6	--	0	--
DEC											
05...	1415	E14	950	7.9	2.0	--	--	10.4	--	0	--
JAN											
18...	1400	E15	1200	7.8	4.5	7	--	10.2	550	0	450
FEB											
21...	1430	E12	1250	8.5	5.0	8	--	9.8	450	48	449
MAR											
13...	1145	E16	1200	7.8	6.5	--	3.0	9.9	550	0	451
APR											
03...	1420	E22	1300	8.2	10.0	5	--	9.9	490	0	400
18...	1130	E56	700	7.4	9.5	45	--	8.6	300	0	250
25...	1115	E39	900	7.9	9.0	--	280	8.5	430	0	353
MAY											
24...	1130	E105	875	7.7	10.0	20	--	8.8	400	0	330
JUN											
19...	1445	E18	1380	8.2	12.5	10	--	8.2	630	0	520
JUL											
12...	1145	E7.9	1500	7.8	17.0	--	2.0	9.7	630	0	517
17...	1110	E7.5	1500	7.8	17.5	5	--	10.1	630	0	520
AUG											
22...	1130	E31	1240	8.2	13.0	10	--	8.1	530	0	430
SEP											
04...	1215	E19	1210	8.3	15.0	--	--	8.2	540	--	--
21...	0945	E10	1270	8.2	9.0	10	--	9.1	--	--	--
27...	1145	E6.0	1470	8.2	13.5	--	--	9.7	650	--	--

E ESTIMATED.

09306061 PICEANCE CREEK ABOVE HUNTER CREEK, NEAR RIO BLANCO, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L)	COLI- FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, (COLS. PER 100 ML)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)
OCT										
25...	1100	--	--	--	--	520	0	75	81	200
NOV										
14...	1300	--	--	--	--	470	--	84	62	--
DEC										
05...	1415	12	K10	K10	1200	--	--	--	--	--
JAN										
18...	1400	--	--	--	--	430	0	73	60	130
FEB										
21...	1430	--	--	--	--	490	41	91	63	140
APR										
03...	1420	--	--	--	--	430	27	73	60	130
18...	1130	100	6600	5000	1100	250	7	50	31	77
MAY										
24...	1130	68	--	--	--	320	0	66	37	85
JUN										
19...	1445	--	--	--	--	500	0	83	70	170
JUL										
17...	1110	18	136	74	620	500	0	80	72	180
AUG										
22...	1130	--	--	--	--	400	0	72	54	120
SEP										
21...	0945	17	460	K48	190	430	0	71	60	140

DATE	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	BROMIDE DIS- SOLVED (MG/L AS BR)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)
OCT										
25...	3.8	3.7	--	370	18	.8	--	18	1100	.10
NOV										
14...	3.0	3.4	--	270	15	.6	--	17	--	.37
DEC										
05...	--	3.4	.0	--	--	--	.2	--	--	--
JAN										
18...	2.7	3.0	--	260	15	.7	--	17	833	.50
FEB										
21...	2.8	2.8	--	290	15	.7	--	15	889	.38
APR										
03...	2.7	3.0	--	270	16	.7	--	15	811	.23
18...	2.1	2.8	.0	140	8.6	.5	.1	11	473	.61
MAY										
24...	2.1	13	.1	150	9.9	.5	.1	14	580	1.4
JUN										
19...	3.3	3.2	--	280	13	.7	--	16	948	.22
JUL										
17...	3.5	3.7	.0	310	14	.7	.1	16	991	.08
AUG										
22...	2.6	2.7	--	260	14	.7	--	18	806	.60
SEP										
21...	3.0	3.0	.0	280	12	.8	.1	16	845	.40

K BASED ON NON-IDEAL COLONY COUNT.

09306061 PICEANCE CREEK ABOVE HUNTER CREEK, NEAR RIO BLANCO, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)
OCT 25...	.01	.11	.16	.04	.02	.62	.74	.66	.76	.06
NOV 14...	.01	.38	.42	.05	.01	.51	.45	.56	.46	.04
DEC 05...	--	--	--	--	--	--	--	--	--	--
JAN 18...	.02	.52	.55	.06	.04	.65	.66	.71	.70	.10
FEB 21...	.02	.40	.43	.05	.08	.41	.27	.46	.35	.09
APR 03...	.02	.25	.22	.02	.00	.35	.23	.37	.23	.03
18...	.08	.69	.66	.09	.09	3.6	.43	3.7	.52	.75
MAY 24...	.04	1.4	1.4	.03	.03	2.1	.49	2.1	.52	.83
JUN 19...	.02	.24	.26	.03	.03	.52	.31	.55	.34	.02
JUL 17...	.00	.08	.11	.03	.01	.50	.42	.53	.43	.00
AUG 22...	.00	.60	.63	.00	.00	.54	.37	.54	.37	.10
SEP 21...	.02	.42	.34	.01	.01	.39	.37	.40	.38	.02

DATE	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	ARSENIC DIS-SOLVED (UG/L AS AS)	BORON, DIS-SOLVED (UG/L AS B)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)
OCT 25...	.05	.03	3	240	20	230	5.1	.6	.10
NOV 14...	.01	.02	2	230	40	90	6.1	1.0	.10
DEC 05...	--	--	--	--	--	--	--	--	--
JAN 18...	.03	.00	2	180	10	40	5.2	1.0	.00
FEB 21...	.03	.03	2	160	20	0	4.8	.9	.00
APR 03...	.02	.00	1	170	20	60	3.9	.5	.00
18...	.11	.02	2	130	30	20	6.9	7.4	.00
MAY 24...	.03	.00	3	120	10	20	9.3	--	--
JUN 19...	.02	.01	5	220	60	50	--	.5	.00
JUL 17...	.01	.04	4	260	10	100	8.8	.3	.00
AUG 22...	.03	.01	2	200	10	20	6.8	2.0	.00
SEP 21...	.01	.01	2	180	<10	20	7.0	.1	.00

09306061 PICEANCE CREEK ABOVE HUNTER CREEK, NEAR RIO BLANCO, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	BARIUM, DISSOLVED (UG/L AS BA)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BERYLLIUM, DISSOLVED (UG/L AS BE)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)
DEC											
05...	--	20	--	--	70	--	--	--	<1	--	0
APR											
03...	--	--	--	--	--	--	--	--	--	--	--
18...	190	50	--	--	0	10	0	--	0	--	0
MAY											
24...	31000	0	5	600	100	0	0	0	1	70	0
JUL											
17...	--	10	--	--	90	--	--	--	<1	--	0
SEP											
21...	--	0	2	100	80	--	--	0	<1	0	0

DATE	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	LITHIUM TOTAL RECOVERABLE (UG/L AS LI)	LITHIUM DISSOLVED (UG/L AS LI)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)
DEC											
05...	--	--	--	5	--	--	6	--	10	--	--
APR											
03...	--	--	--	--	--	--	--	--	--	--	--
18...	14	0	--	2	--	--	0	90	4	--	--
MAY											
24...	8	0	26	2	35000	28	0	80	7	910	.0
JUL											
17...	--	--	--	0	--	--	0	--	9	--	--
SEP											
21...	0	--	1	2	280	12	0	--	10	40	.0

DATE	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	SILVER, DISSOLVED (UG/L AS AG)	STRONTIUM, DISSOLVED (UG/L AS SR)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)
DEC											
05...	.0	--	6	--	--	--	1	--	--	1900	--
APR											
03...	--	--	--	--	--	--	--	--	--	--	--
18...	.0	4	4	43	0	--	1	--	0	910	--
MAY											
24...	.0	7	6	30	8	2	2	0	0	1100	110
JUL											
17...	1.6	--	18	--	--	--	1	--	--	2500	--
SEP											
21...	.1	3	<10	4	--	1	0	0	--	2200	0

DATE	ZINC, DISSOLVED (UG/L AS ZN)	GROSS ALPHA, DISSOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DISSOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DISSOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	RADIUM 226, DISSOLVED, RADON METHOD (PCI/L)	URANIUM DISSOLVED, EXTRACTION (UG/L)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)
DEC											
05...	10	<6.0	2.9	3.4	2.5	3.1	2.3	.08	3.7	.00	1
APR											
03...	--	5.9	150	5.6	84	5.4	76	.09	2.5	--	--
18...	10	--	--	--	--	--	--	--	--	.00	0
MAY											
24...	20	<9.8	77	6.3	45	6.0	39	.11	2.4	.00	0
JUL											
17...	<3	<16	<.4	<5.7	<.4	<5.3	<.4	.09	4.2	.00	0
SEP											
21...	<3	<13	<.4	<5.3	.4	<5.5	.4	.07	3.7	.00	0

09306061 PICEANCE CREEK ABOVE HUNTER CREEK, NEAR RIO BLANCO, CO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1400	---			---	---	---	945	1010	1500	1380	1180
2	1380	---			---	---	1250	926	1030	1490	1350	1200
3	1440	---			---	---	1260	903	1030	1520	1340	1230
4	1470	---			---	---	1250	934	1040	1530	---	1270
5	1470	---			---	---	1230	---	1070	1530	---	1260
6	1490	---			---	---	1220	---	1100	1560	---	1260
7	1510	---			---	---	1210	886	1120	1540	---	1260
8	1530	---			---	---	1170	860	1140	1540	1240	1250
9	1530	---			1270	---	1040	880	1150	1530	1230	1260
10	1540	---			1270	---	886	903	1170	1530	---	1240
11	1580	---			1270	---	998	913	1180	1530	1200	1250
12	1580	---			1260	---	1130	897	1200	1520	1220	1220
13	1570	---			1260	1210	1140	---	1210	1520	1210	1230
14	1550	1280			1250	1250	1140	---	1200	1530	1210	1230
15	1530	1280			1260	1250	1050	---	1230	1530	1220	1230
16	1520	1280			1270	1230	864	---	1270	1520	1220	1240
17	1530	1280			1260	1240	795	---	1310	1490	1220	1260
18	1540	1280			1270	1270	792	---	1350	1490	1220	1250
19	1580	1270			1270	1280	832	---	1370	1500	1210	1260
20	1580	1270			1270	1280	912	---	1380	1490	1210	---
21	1570	1270			1270	---	---	---	1410	1480	1210	1260
22	---	1270			1250	1250	---	---	---	1500	1220	1410
23	---	1260			1260	1280	---	887	---	1500	1210	---
24	---	1260			1260	1290	938	902	1490	1500	1220	---
25	---	1230			1270	1280	929	---	1480	1520	1210	1590
26	---	1230			1270	1260	940	---	1490	1450	1210	1550
27	---	1250			1270	1270	943	---	1490	1400	1210	1540
28	---	1250			---	1250	941	---	1560	1420	1200	1550
29	---	1250			---	1230	935	---	1570	1440	1170	1540
30	---	1250			---	1240	931	981	1530	1420	1180	1520
31	---	---			---	---	---	994	---	1400	1180	---

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	16.0	7.0	---	---					---	---	---	---
2	15.0	7.5	---	---					---	---	---	---
3	14.5	5.0	---	---					---	---	---	---
4	15.5	5.5	---	---					---	---	---	---
5	15.5	6.5	---	---					---	---	---	---
6	15.5	6.5	---	---					---	---	---	---
7	15.0	7.5	---	---					---	---	---	---
8	14.0	8.0	---	---					---	---	---	---
9	15.0	8.0	---	---					---	---	---	---
10	14.5	8.0	---	---					5.5	.5	---	---
11	15.0	8.0	---	---					7.0	2.0	---	---
12	15.0	7.5	---	---					7.5	2.5	---	---
13	13.0	7.0	---	---					8.0	4.0	11.5	5.0
14	14.0	6.5	5.5	4.5					9.0	4.0	9.0	1.0
15	14.0	7.0	5.0	4.0					8.5	2.0	11.5	2.5
16	12.5	7.0	6.0	3.5					9.0	3.0	12.5	3.0
17	11.5	7.5	5.0	3.0					11.0	3.5	12.0	3.0
18	13.0	8.5	5.0	2.0					11.0	1.0	9.0	3.5
19	14.0	7.0	5.5	2.0					6.0	2.0	12.0	4.0
20	10.5	7.5	5.5	1.5					7.5	3.0	10.0	4.5
21	11.0	9.5	5.0	1.5					5.0	3.0	---	---
22	---	---	6.0	2.0					3.0	.0	8.0	2.0
23	---	---	5.0	1.5					4.0	.0	11.0	1.5
24	---	---	4.5	1.0					8.0	1.0	13.0	2.0
25	---	---	5.0	1.5					7.0	.0	12.5	3.5
26	---	---	5.0	2.5					5.5	1.0	13.0	3.5
27	---	---	4.5	1.0					4.0	3.0	8.5	5.0
28	---	---	3.0	.5					---	---	13.0	5.0
29	---	---	4.5	2.0					---	---	7.5	5.0
30	---	---	5.5	3.0					---	---	11.0	1.5
31	---	---	---	---					---	---	---	---
MONTH	16.0	5.0	6.0	.5					11.0	.0	13.0	1.0

09306061 PICEANCE CREEK ABOVE HUNTER CREEK, NEAR RIO BLANCO, CO--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	12.5	8.0	16.0	6.5	20.0	11.5	20.5	11.5	19.0	8.5
2	---	---	9.5	7.5	17.0	7.0	19.0	10.5	20.5	10.5	19.0	9.0
3	11.0	.5	9.0	5.0	16.5	8.0	16.5	10.0	20.5	11.0	19.5	9.5
4	9.5	1.5	---	---	18.5	9.0	16.5	10.0	---	---	19.5	9.5
5	15.0	4.0	---	---	18.5	9.0	19.5	9.5	---	---	20.0	8.5
6	16.0	4.0	---	---	16.5	10.0	16.5	9.5	---	---	20.0	9.0
7	15.5	4.5	5.5	4.5	14.5	10.0	22.0	9.0	---	---	18.5	9.0
8	15.5	4.5	8.5	3.0	10.5	8.5	20.0	9.5	19.0	12.5	16.5	9.5
9	10.0	4.0	10.0	4.5	15.0	7.0	21.0	9.5	18.0	12.0	18.0	10.0
10	7.5	2.0	11.0	4.5	17.5	7.0	21.5	9.5	---	---	18.0	12.0
11	6.0	1.0	11.0	4.5	19.5	8.5	22.5	9.0	20.0	10.0	17.5	10.5
12	9.5	.5	15.0	5.0	20.0	9.5	23.0	9.5	19.0	11.0	17.0	8.0
13	12.5	2.5	---	---	20.0	10.0	22.0	10.0	18.5	12.5	14.0	7.0
14	15.0	4.0	---	---	19.0	10.5	22.0	9.5	15.0	11.0	16.0	6.5
15	15.0	5.5	---	---	19.0	10.5	20.0	10.5	14.5	10.0	16.5	6.0
16	14.5	5.0	---	---	19.5	9.0	22.0	10.5	15.0	11.5	17.0	6.5
17	14.5	6.5	---	---	18.5	9.0	22.5	13.0	15.0	9.5	17.0	7.5
18	14.0	7.0	---	---	15.5	9.5	23.5	11.0	13.5	10.0	17.5	7.5
19	12.5	7.0	---	---	14.0	8.5	21.0	10.0	15.0	10.5	17.0	8.5
20	13.5	5.0	---	---	19.0	7.5	17.5	10.5	13.0	10.5	---	---
21	---	---	---	---	19.5	8.5	19.0	11.5	17.0	9.0	16.0	12.0
22	---	---	---	---	---	---	19.0	12.0	19.5	9.5	16.5	8.5
23	---	---	---	---	---	---	20.0	11.5	19.5	10.0	---	---
24	13.5	8.0	14.5	9.5	20.5	9.5	22.0	11.5	20.5	10.5	---	---
25	13.0	7.5	---	---	20.0	10.0	22.0	10.5	18.5	10.0	15.5	9.0
26	14.0	5.0	---	---	20.0	9.5	18.5	15.0	18.5	9.5	17.0	10.0
27	14.5	5.0	---	---	18.5	10.0	20.0	12.0	19.0	9.5	17.5	9.0
28	13.5	7.0	---	---	18.5	9.0	21.0	12.0	20.0	11.0	17.0	8.0
29	14.0	5.0	---	---	21.0	9.5	20.5	11.0	19.5	9.5	17.0	7.5
30	13.0	6.0	14.5	7.5	19.0	10.5	20.5	10.5	15.0	10.0	16.5	7.5
31	---	---	16.0	7.5	---	---	20.5	10.5	19.0	10.0	---	---

PH (UNITS), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.2	---			---	---	---	8.5	7.9	8.2	8.1	8.3
2	8.2	---			---	---	8.5	8.5	7.9	8.2	8.2	8.3
3	8.2	---			---	---	8.5	8.5	8.0	8.1	8.1	8.3
4	8.1	---			---	---	8.5	8.5	8.0	8.1	---	8.3
5	8.1	---			---	---	8.5	---	8.0	8.1	---	8.3
6	8.1	---			---	---	8.5	---	8.0	8.1	---	8.3
7	8.1	---			---	---	8.5	8.5	8.0	8.2	---	8.4
8	8.0	---			---	---	8.5	8.5	8.0	8.2	8.3	8.4
9	8.0	---			8.6	---	8.4	8.4	8.0	8.1	8.3	8.3
10	8.0	---			8.6	---	8.4	8.4	8.1	8.2	---	8.3
11	8.0	---			8.6	---	8.5	8.3	8.1	8.1	8.3	8.3
12	8.1	---			8.6	---	8.5	8.2	8.1	8.1	8.3	8.3
13	8.0	---			8.6	8.5	8.5	---	8.1	8.1	8.3	8.4
14	8.0	8.3			8.6	8.5	8.5	---	8.1	8.1	8.3	8.4
15	8.0	8.3			8.6	8.5	8.5	---	8.2	8.1	8.3	8.4
16	8.0	8.3			8.5	8.5	8.4	---	8.2	8.2	8.3	8.4
17	8.0	8.3			8.5	8.5	8.4	---	8.2	8.2	8.3	8.4
18	8.0	8.3			8.6	8.5	8.4	---	8.2	8.2	8.3	8.4
19	8.0	8.3			8.6	8.5	8.5	---	8.2	8.2	8.3	8.4
20	8.0	8.3			8.6	8.5	8.5	---	8.1	8.2	8.3	---
21	8.0	8.4			8.5	---	---	---	8.1	8.2	8.3	8.4
22	---	8.4			8.5	---	---	---	---	8.2	8.3	8.3
23	---	8.4			8.5	8.5	---	8.1	---	8.2	8.3	---
24	---	8.4			8.5	8.4	8.5	8.1	8.1	8.1	8.3	---
25	---	8.4			8.5	8.5	8.5	---	8.1	8.1	8.3	8.2
26	---	8.4			8.5	8.5	8.5	---	8.1	8.1	8.3	8.2
27	---	8.4			8.5	8.5	8.5	---	8.1	8.2	8.3	8.2
28	---	8.4			---	8.5	8.5	---	8.0	8.2	8.3	8.2
29	---	8.4			---	8.4	8.5	---	8.1	8.2	8.3	8.3
30	---	8.4			---	8.4	8.5	8.1	8.1	8.2	8.4	8.2
31	---	---			---	---	---	8.0	---	8.2	8.3	---

09306061 PICEANCE CREEK ABOVE HUNTER CREEK, NEAR RIO BLANCO, CO--Continued

DISSOLVED OXYGEN (DO), MG/L, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1			---	---					---	---	---	---
2			---	---					---	---	---	---
3			---	---					---	---	---	---
4			---	---					---	---	---	---
5			---	---					---	---	---	---
6			---	---					---	---	---	---
7			---	---					---	---	---	---
8			---	---					---	---	---	---
9			---	---					---	---	---	---
10			---	---					9.6	8.1	---	---
11			---	---					---	---	---	---
12			---	---					---	---	---	---
13			---	---					---	---	---	---
14			8.9	8.1					---	---	11.1	9.0
15			9.2	8.5					---	---	10.9	8.5
16			9.4	8.5					---	---	10.4	8.2
17			9.6	8.6					---	---	10.2	8.2
18			9.7	8.7					---	---	10.4	8.8
19			9.7	8.4					---	---	10.4	8.4
20			9.8	8.3					10.2	9.2	10.4	8.6
21			9.7	8.4					10.0	9.6	---	---
22			9.5	8.3					10.6	10.0	10.8	9.0
23			9.8	8.5					10.7	9.8	11.0	8.6
24			9.9	8.7					10.9	9.4	11.0	8.0
25			9.7	8.4					10.9	9.4	11.1	8.3
26			9.8	8.6					10.7	9.6	11.0	8.0
27			9.9	8.8					10.2	9.8	10.7	8.8
28			10.0	8.9					---	---	10.8	8.1
29			9.8	8.6					---	---	10.0	8.6
30			9.5	8.2					---	---	10.7	8.0
31			---	---					---	---	---	---

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	8.3	7.8	8.8	6.8	10.6	6.4	---	---	9.0	7.1
2	10.5	8.7	8.8	8.4	8.3	6.5	10.2	6.3	---	---	9.0	7.1
3	11.2	8.7	9.3	8.7	8.0	6.5	9.8	6.3	---	---	8.8	7.0
4	11.2	8.7	9.7	8.5	7.7	6.2	10.1	6.4	---	---	8.7	7.0
5	11.1	7.7	---	---	7.7	6.1	10.3	6.4	---	---	9.0	7.0
6	11.2	7.5	---	---	7.4	6.5	11.2	6.6	---	---	9.0	7.0
7	11.1	7.7	9.3	9.0	7.4	6.8	11.7	6.4	---	---	9.0	7.3
8	10.1	7.5	9.5	8.1	8.1	7.3	11.0	6.5	7.9	6.7	9.0	7.4
9	9.7	8.4	8.9	8.0	8.6	7.1	10.3	6.5	7.9	7.0	8.9	7.2
10	9.9	8.6	9.1	7.7	8.5	6.5	10.0	6.6	---	---	8.7	7.1
11	10.2	9.1	9.0	7.9	8.0	6.3	9.6	6.7	8.4	6.7	9.1	7.3
12	10.3	8.6	9.2	7.3	7.7	6.3	10.1	6.7	7.9	6.5	9.6	7.5
13	10.3	8.1	---	---	7.7	6.3	10.0	6.6	7.7	6.8	9.9	8.0
14	9.9	7.7	---	---	7.6	6.5	9.7	6.7	8.3	7.2	10.0	7.8
15	9.7	7.6	---	---	7.6	6.5	9.9	6.7	8.5	7.5	9.9	7.7
16	9.8	7.6	---	---	8.0	6.5	10.8	6.9	8.1	7.5	10.0	7.5
17	9.4	7.5	---	---	8.1	6.8	10.1	6.3	8.6	7.5	10.0	7.5
18	9.0	7.5	---	---	7.9	7.1	9.8	6.4	8.5	7.9	10.0	7.5
19	9.1	7.9	---	---	8.3	7.3	9.8	6.1	8.4	7.6	9.9	7.9
20	9.6	7.8	---	---	8.6	6.8	9.4	6.3	8.4	7.8	---	---
21	---	---	---	---	8.4	6.8	8.5	6.1	8.7	7.2	10.1	7.5
22	---	---	---	---	---	---	8.8	6.2	8.6	6.8	9.9	7.6
23	---	---	9.3	7.9	---	---	9.1	6.2	8.5	6.8	---	---
24	8.7	7.5	10.4	8.3	8.3	6.1	9.1	6.0	8.4	6.8	---	---
25	8.8	7.6	---	---	8.5	6.3	8.8	6.0	8.5	7.1	9.8	6.9
26	9.3	7.6	---	---	9.1	6.5	7.3	6.3	8.6	7.1	10.3	7.1
27	9.3	7.5	---	---	9.0	6.5	7.4	6.3	8.7	7.0	10.7	7.2
28	8.8	7.7	---	---	9.2	6.0	7.6	6.3	8.4	6.9	11.1	7.4
29	9.1	7.6	---	---	10.1	6.3	7.6	6.4	8.7	7.0	11.5	7.4
30	8.8	7.5	9.0	7.2	10.5	6.2	7.9	6.4	8.7	7.6	11.4	7.4
31	---	---	9.1	7.9	---	---	7.9	6.3	8.8	7.1	---	---

09306061 PICEANCE CREEK ABOVE HUNTER CREEK, NEAR RIO BLANCO, CO--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM
APR									
27...	1550	44	1100	131	15	23	38	71	86
27...	1600	44	1140	135	19	27	42	74	87
MAY									
15...	1305	129	4020	1400	21	28	48	71	85
24...	1250	112	2070	626	14	21	35	--	--

DATE	SED. SUSP. FALL DIAM. % FINER THAN .250 MM	SED. SUSP. FALL DIAM. % FINER THAN .500 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 2.00 MM
APR								
27...	98	100	--	--	--	--	--	--
27...	99	100	--	--	--	--	--	--
MAY								
15...	98	100	--	--	--	--	--	--
24...	--	--	61	72	86	97	97	97

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	4.3	34	.39	5.7	40	.62	15	---	10
2	4.1	48	.53	6.2	40	.67	16	535	23
3	.52	40	.06	6.5	---	1.2	16	---	15
4	.96	35	.09	6.5	---	1.2	15	495	20
5	2.0	45	.24	6.8	---	1.3	14	425	16
6	2.5	63	.42	12	---	5.6	14	---	9.0
7	3.1	44	.37	13	---	7.0	14	---	9.0
8	3.6	---	.45	14	---	9.0	15	---	10
9	4.8	---	.70	17	---	18	17	---	18
10	5.4	---	.85	17	---	18	15	---	10
11	4.0	---	.50	16	---	15	14	---	9.0
12	5.6	22	.33	20	---	35	17	---	18
13	5.3	68	.97	19	---	28	16	---	15
14	4.8	---	.70	19	292	15	15	---	10
15	4.0	40	.43	19	335	17	14	---	9.0
16	3.8	72	.73	18	---	22	13	---	7.0
17	3.6	73	.70	17	213	9.8	12	---	5.6
18	3.6	---	.68	16	860	37	13	---	7.0
19	4.5	103	1.3	17	1020	46	11	---	4.2
20	4.5	101	1.2	17	850	39	10	---	3.2
21	4.0	89	.96	17	660	30	10	---	3.2
22	3.8	---	.50	17	---	18	10	---	3.2
23	3.9	55	.58	18	820	40	11	---	4.2
24	3.7	43	.43	17	510	23	11	---	4.2
25	4.0	45	.49	18	413	20	11	---	4.2
26	4.6	43	.53	18	343	17	11	---	4.2
27	4.7	68	.86	17	---	10	12	---	5.6
28	4.4	50	.59	17	188	8.6	12	---	5.6
29	4.5	45	.55	17	265	12	12	---	3.6
30	5.1	---	.80	16	428	19	12	---	5.6
31	5.7	60	.92	---	---	---	12	---	5.6
TOTAL	123.38	---	18.85	454.7	---	523.99	410	---	277.2

09306061 PICEANCE CREEK ABOVE HUNTER CREEK, NEAR RIO BLANCO, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JANUARY			FEBRUARY			MARCH	
1	12		5.6	14	---	9.0	14	---	9.0
2	12		5.6	14	---	9.0	14	---	9.0
3	12		5.6	14	---	9.0	15	---	10
4	12		5.6	14	---	9.0	14	---	9.0
5	12		5.6	14	---	9.0	13	---	7.0
6	12		5.6	13	---	7.0	12	---	5.6
7	12		5.6	13	---	7.0	13	---	7.0
8	13		7.0	13	---	7.0	13	---	7.0
9	14		9.0	13	110	3.9	13	---	7.0
10	15		10	13	---	7.0	13	---	7.0
11	15		10	13	---	7.0	14	---	9.0
12	15		10	13	---	7.0	15	---	10
13	15		10	13	---	7.0	16	659	29
14	15		10	14	---	9.0	16	---	15
15	15		10	14	---	9.0	17	---	18
16	15		10	14	---	9.0	18	---	22
17	16		15	14	---	9.0	19	---	28
18	15		10	14	---	9.0	18	---	22
19	16		15	14	100	3.8	17	---	18
20	16		15	14	65	2.5	17	---	18
21	16		15	12	70	2.3	17	500	23
22	17		18	12	---	2.5	17	779	36
23	16		15	12	80	2.6	16	954	41
24	16		15	12	---	2.5	16	---	15
25	16		15	12	---	3.0	16	---	15
26	16		15	12	112	3.6	17	---	18
27	15		10	14	---	9.0	19	483	25
28	15		10	15	---	10	18	559	27
29	15		10	---	---	---	22	960	57
30	15		10	---	---	---	21	891	51
31	15		10	---	---	---	22	760	45
TOTAL	451		323.2	373	---	184.7	502	---	619.6

09306061 PICEANCE CREEK ABOVE HUNTER CREEK, NEAR RIO BLANCO, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	21	495	28	38	1350	139	73	945	186
2	21	352	20	37	1800	180	66	1000	178
3	22	228	14	50	1170	158	65	900	158
4	22	428	25	50	1260	170	65	935	164
5	23	374	23	39	935	98	58	825	129
6	23	294	18	41	935	104	48	715	93
7	24	144	9.3	55	1560	232	42	605	69
8	26	389	27	74	2240	448	41	605	67
9	31	1400	117	71	2320	445	42	550	62
10	49	4750	628	72	2410	469	37	429	43
11	41	2000	221	80	---	500	33	374	33
12	32	1600	138	90	---	690	30	341	28
13	34	900	83	94	3800	964	28	341	26
14	36	800	78	98	---	980	30	275	22
15	46	1600	199	116	4000	1250	26	220	15
16	53	2900	415	130	4070	1430	22	192	11
17	55	3200	475	136	3920	1440	19	156	8.0
18	56	4100	620	141	3440	1310	19	195	10
19	53	3500	501	149	3150	1270	18	143	6.9
20	47	2600	330	144	3040	1180	18	---	7.5
21	41	1750	194	135	3220	1170	18	---	7.5
22	40	1450	157	118	2870	914	17	---	6.5
23	38	1400	144	105	2600	737	17	135	6.2
24	38	1750	180	105	2040	578	16	128	5.5
25	39	1800	190	104	2110	592	16	128	5.5
26	40	1350	146	100	1770	478	13	226	8.9
27	40	1400	151	96	2660	689	14	216	8.0
28	39	1400	147	95	1880	482	11	117	3.5
29	39	1600	168	92	1600	397	11	104	3.1
30	40	1400	151	88	1100	261	12	86	2.8
31	---	---	---	81	1060	232	---	---	---
TOTAL	1109	---	5597.3	2824	---	19987	925	---	1373.9

09306061 PICEANCE CREEK ABOVE HUNTER CREEK, NEAR RIO BLANCO, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JULY			AUGUST			SEPTEMBER	
1	14	90	3.4	30	---	34	28	---	20
2	15	76	3.1	30	---	34	27	---	17
3	17	92	4.2	28	---	30	22	---	10
4	19	110	5.6	24	---	20	19	---	8.0
5	16	92	4.0	24	---	20	15	126	5.1
6	9.0	37	.90	27	---	20	13	51	1.8
7	8.7	---	1.0	27	---	20	14	62	2.3
8	8.7	---	1.0	29	---	20	16	88	3.8
9	11	57	1.7	30	264	21	16	91	3.9
10	10	95	2.6	37	216	22	16	112	4.8
11	9.6	72	1.9	37	253	25	17	68	3.1
12	7.9	97	2.1	32	297	26	21	99	5.6
13	8.0	97	2.1	26	385	27	20	118	6.4
14	8.9	92	2.2	29	260	20	20	101	5.5
15	6.6	97	1.7	31	205	17	20	97	5.2
16	6.0	97	1.6	31	310	26	17	79	3.6
17	7.5	109	2.2	32	341	29	11	65	1.9
18	7.9	136	2.9	30	286	23	12	38	1.2
19	7.3	128	2.5	31	280	23	15	39	1.6
20	13	230	8.1	32	308	27	19	---	1.7
21	19	171	8.8	32	286	25	19	42	2.2
22	18	209	10	31	264	22	10	55	1.5
23	19	198	10	29	312	24	5.0	76	1.0
24	17	198	9.1	28	240	18	4.0	55	.59
25	17	180	8.3	28	228	17	5.7	19	.29
26	27	486	35	27	260	19	4.1	32	.35
27	30	774	63	26	286	20	6.0	40	.65
28	25	---	30	26	252	18	6.8	61	1.1
29	21	---	22	30	378	31	9.0	97	2.4
30	23	---	22	30	---	24	11	86	2.6
31	26	---	29	30	---	24	---	---	---
TOTAL	453.1	---	302.00	914	---	726	438.6	---	125.18
YEAR	8977.78		30058.92						

09306175 BLACK SULPHUR CREEK NEAR RIO BLANCO, CO

LOCATION.--Lat 39°52'16", long 108°17'18", in SE¼SW¼ sec.15, T.2 S., R.97 W., Rio Blanco County, Hydrologic Unit 14050006, on right bank 600 ft (183 m) upstream from mouth, 0.2 mi (0.3 km) west of Rock School, and 23.7 mi (38.1 km) northwest of Rio Blanco.

DRAINAGE AREA.--103 mi² (267 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--December 1974 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,130 ft (1,868 m), from topographic map.

REMARKS.--Records good. Diversions for irrigation of about 160 acres (648,000 m²) above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 52 ft³/s (1.47 m³/s) May 29, 1979, gage height, 2.47 ft (0.753 m); minimum daily, 0.20 ft³/s (0.006 m³/s) May 12, 13, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 52 ft³/s (1.47 m³/s) at 1500 May 29, gage height, 2.47 ft (0.753 m); minimum daily, 1.3 ft³/s (0.037 m³/s) Sept. 25, 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	4.5	6.4	6.8	4.1	4.8	5.3	2.9	37	11	11	10
2	1.4	4.7	6.4	4.9	5.3	5.5	5.3	2.7	33	9.5	12	10
3	2.2	4.4	4.1	5.3	5.6	5.4	5.3	3.7	29	10	12	9.5
4	2.2	4.1	6.0	6.4	6.0	4.7	5.3	3.5	29	11	13	9.0
5	1.8	4.1	3.3	6.0	5.3	5.3	4.9	3.3	25	11	18	8.5
6	2.0	4.3	3.5	6.0	5.3	6.3	5.3	4.1	22	9.5	17	7.6
7	4.2	4.5	3.3	4.9	4.6	6.3	5.3	6.4	21	8.5	17	7.2
8	4.0	4.4	2.2	3.5	4.6	7.0	5.3	8.0	21	9.0	17	7.2
9	4.0	4.4	2.9	4.1	4.6	6.1	5.6	9.0	22	8.5	16	7.2
10	4.0	4.3	3.5	4.9	5.3	6.4	6.4	9.5	19	7.6	15	6.4
11	4.0	4.8	3.7	5.6	5.6	6.8	6.4	10	18	7.6	13	6.0
12	3.8	8.6	4.1	5.6	6.8	7.1	6.4	10	18	9.0	13	5.6
13	3.8	7.2	4.1	4.9	7.6	7.8	6.8	11	16	9.0	12	4.9
14	2.6	6.8	3.7	4.9	9.0	7.8	6.8	11	16	10	12	4.9
15	1.9	6.4	4.1	5.6	9.0	7.7	6.4	11	15	12	12	5.3
16	2.5	6.8	4.9	5.6	9.0	8.5	6.4	13	14	12	14	5.6
17	2.2	6.8	4.9	5.6	8.5	7.5	6.4	14	13	11	15	5.6
18	2.2	6.4	6.0	5.6	8.5	7.1	6.4	15	12	10	12	5.6
19	2.5	6.4	6.4	5.6	7.6	6.6	6.0	18	9.8	9.0	12	4.6
20	3.7	6.0	6.4	5.6	7.2	6.9	5.6	20	9.6	10	13	3.9
21	4.0	6.0	6.4	4.9	6.4	6.9	5.6	26	9.4	11	13	3.9
22	4.2	6.0	6.4	5.3	6.0	6.8	4.9	28	12	10	10	3.9
23	4.2	6.0	6.4	3.7	5.6	6.4	4.1	38	13	9.5	10	3.9
24	4.5	6.0	6.4	4.1	5.3	6.4	4.1	41	16	9.0	9.5	2.2
25	4.8	6.0	6.4	6.0	5.3	7.2	4.1	45	22	8.0	9.5	1.3
26	4.6	6.0	5.3	5.3	5.3	7.2	4.6	47	33	9.0	9.0	2.2
27	4.6	6.0	6.0	3.7	5.3	6.8	3.7	48	36	8.5	9.0	2.1
28	4.9	6.0	6.4	4.4	4.9	6.4	3.9	50	29	7.6	8.5	1.7
29	4.6	6.4	6.8	3.7	---	6.0	3.9	48	20	8.0	9.0	1.3
30	4.9	6.4	6.8	2.5	---	6.0	3.9	45	15	10	10	1.4
31	4.6	---	8.0	2.7	---	6.0	---	40	---	13	10	---
TOTAL	106.4	170.7	161.2	153.7	173.6	203.7	160.4	642.1	604.8	298.8	383.5	158.5
MEAN	3.43	5.69	5.20	4.96	6.20	6.57	5.35	20.7	20.2	9.64	12.4	5.28
MAX	4.9	8.6	8.0	6.8	9.0	8.5	6.8	50	37	13	18	10
MIN	1.4	4.1	2.2	2.5	4.1	4.7	3.7	2.7	9.4	7.6	8.5	1.3
AC-FT	211	339	320	305	344	404	318	1270	1200	593	751	314

CAL YR 1978 TOTAL 1048.87 MEAN 2.87 MAX 8.6 MIN .20 AC-FT 2080
WTR YR 1979 TOTAL 3217.40 MEAN 8.81 MAX 50 MIN 1.3 AC-FT 6380

09306175 BLACK SULPHUR CREEK NEAR RIO BLANCO, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--January 1975 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1975 to current year.
WATER TEMPERATURE: April 1975 to current year.
SUSPENDED-SEDIMENT DISCHARGE: October 1975 to current year.

INSTRUMENTATION.--Water-quality monitor since April 1975. Pumping sediment sampler since October 1975.

EXTREMES FOR PERIOD OF RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 2,920 micromhos Oct. 16, 1975; minimum, 870 micromhos Feb. 26, 1978.
WATER TEMPERATURES: Maximum, 24.0°C July 30, 1976; minimum, 0.0°C many days during winter months some years.
SEDIMENT CONCENTRATIONS: Maximum daily, 19,800 mg/L Aug. 5, 1978; minimum daily, 8 mg/L Oct. 10, 1977, June 11, 1978.
SEDIMENT LOADS: Maximum daily, 214 tons (194 t) May 26, 1979; minimum daily, 0.01 ton (0.01 t) May 12-14, 1978.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 1,960 micromhos Oct. 18, 19; minimum, 950 micromhos May 28.
WATER TEMPERATURES: Maximum, 22.5°C June 12; minimum, 0.5°C Nov. 27, 28, Dec. 2.
SEDIMENT CONCENTRATIONS: Maximum, 2,000 mg/L May 23; minimum, 13 mg/L, estimated Sept. 30.
SEDIMENT LOADS: Maximum, 214 tons (194 t) May 26; minimum, 0.5 ton (0.05 t) Sept. 25, 29, 30.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)
OCT									
25...	0915	E4.8	1930	7.9	8.0	8.6	630	0	520
NOV									
03...	1300	E4.4	1800	8.2	11.5	11.0	630	--	--
13...	1115	8.0	1650	8.5	1.0	9.5	590	2	490
DEC									
11...	1340	3.5	1700	7.8	2.5	10.2	610	0	500
JAN									
23...	1400	5.3	1650	8.0	2.0	10.4	610	0	500
FEB									
07...	1330	E4.6	1500	8.0	4.5	9.5	580	0	476
27...	1600	4.9	1540	8.3	4.0	9.8	560	0	460
MAR									
13...	1315	E7.8	1490	7.8	10.5	8.7	560	0	459
29...	0950	E6.0	1600	8.7	6.0	10.0	580	0	480
APR									
18...	1200	E6.4	1500	7.9	13.5	8.8	560	0	460
25...	1200	E4.1	1520	8.0	14.5	8.9	560	0	459
MAY									
17...	1055	9.5	1400	8.0	13.0	8.4	530	0	430
23...	1710	37	1080	7.8	--	--	420	0	340
JUN									
25...	1525	E22	1400	8.1	20.0	8.6	550	0	450
JUL									
12...	1315	E9.0	1820	8.0	17.5	9.5	620	0	509
17...	1015	E11	1750	7.6	14.0	9.1	630	0	520
AUG									
22...	1315	E10	1300	8.3	15.0	8.1	--	--	--
SEP									
04...	1345	E9.0	1400	8.3	16.5	8.5	540	--	--
21...	0850	E3.9	1670	8.3	7.0	9.7	--	--	--
29...	1310	E1.3	1770	8.1	15.0	10.2	630	0	517

E ESTIMATED.

09306175 BLACK SULPHUR CREEK NEAR RIO BLANCO, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	COLIFORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREPTOCOCCI FECAL, (COLS. PER 100 ML)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)
OCT 25...	0915	--	--	--	730	220	110	110	200	3.2	3.1
NOV 13...	1115	--	--	--	660	170	98	100	160	2.7	3.4
DEC 11...	1340	--	--	--	650	150	97	97	180	3.1	2.9
JAN 23...	1400	--	--	--	670	170	100	100	170	2.9	3.1
FEB 27...	1600	--	--	--	640	180	100	93	150	2.6	2.3
MAR 29...	0950	--	--	--	680	210	120	92	150	2.5	2.4
APR 18...	1200	4400	2000	1000	590	130	85	90	150	2.7	2.0
MAY 17...	1055	--	--	--	600	160	97	85	120	2.1	2.5
23...	1710	--	--	--	200	0	77	--	87	--	13
JUN 25...	1525	--	--	--	630	180	95	95	140	2.4	3.1
JUL 17...	1015	--	--	--	690	180	110	100	180	2.8	3.6
AUG 22...	1315	--	--	--	540	120	88	77	130	2.4	1.5
SEP 21...	0850	280	140	290	620	140	100	88	170	3.0	2.4

DATE	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)
OCT 25...	610	12	.5	19	1380	1.88	17.9	.19	.01	.20	.27
NOV 13...	470	23	.4	19	1170	1.59	25.3	.20	.01	.21	.23
DEC 11...	520	10	.5	19	1230	1.67	11.6	.29	.01	.30	.37
JAN 23...	480	9.4	.5	20	1190	1.62	17.0	.23	.02	.25	.24
FEB 27...	460	8.8	.4	17	1110	1.51	14.7	.10	.02	.12	.11
MAR 29...	470	9.0	.5	16	1150	1.56	17.7	.04	.02	.06	.11
APR 18...	450	8.4	.5	17	1080	1.47	18.6	.00	.02	.02	.03
MAY 17...	400	8.1	.5	16	994	1.35	25.5	.31	.02	.33	.24
23...	270	6.8	.5	18	686	.93	68.5	.73	.16	.89	.97
JUN 25...	450	9.2	.5	17	1090	1.48	64.7	.20	.02	.22	.17
JUL 17...	530	9.7	.5	19	1270	1.73	37.7	.15	.02	.17	.16
AUG 22...	370	7.1	.5	20	953	1.30	25.7	--	--	--	.43
SEP 21...	530	8.4	.5	21	1220	1.66	12.8	.15	.06	.21	.13

09306175 BLACK SULPHJR CREEK NEAR RIO BLANCO, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM DIS-SOLVED (UG/L AS CD)
OCT											
25...	.04	--	.40	.44	.04	.01	.01	2	100	170	0
NOV											
13...	.01	--	.52	.53	.03	.02	.02	2	50	40	<1
DEC											
11...	.03	.00	.44	.47	.04	.02	.01	1	50	160	<1
JAN											
23...	.06	--	.39	.45	.18	.04	.00	2	60	150	<1
FEB											
27...	.06	--	.53	.59	.04	.03	.02	1	0	120	1
MAR											
29...	.02	--	.62	.64	.03	.01	.00	1	0	120	0
APR											
18...	.06	--	.12	.18	.03	.02	.00	1	60	140	<1
MAY											
17...	.03	--	.48	.51	.16	.02	.00	2	100	110	0
23...	.07	--	2.4	2.5	.53	.03	.00	2	100	100	0
JUN											
25...	.02	--	.31	.33	.03	.03	.01	5	90	180	<1
JUL											
17...	.09	--	.41	.50	.01	.04	.05	5	90	200	<1
AUG											
22...	--	--	--	--	--	--	.01	2	70	120	2
SEP											
21...	.19	--	.16	.35	.01	.01	.01	2	100	150	0

DATE	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	ZINC, DIS-SOLVED (UG/L AS ZN)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	PHENOLS (UG/L)
OCT										
25...	2	20	10	70	.0	0	5700	0	.10	--
NOV										
13...	5	80	10	70	.6	1	4500	8	.10	--
DEC										
11...	1	130	10	60	.0	1	4700	6	.10	0
JAN										
23...	2	20	10	70	.0	1	4700	4	.00	--
FEB										
27...	2	90	10	40	.0	1	4500	20	.00	--
MAR										
29...	0	10	20	60	.0	1	4100	20	.00	--
APR										
18...	0	30	10	30	.0	0	4700	<3	.00	0
MAY										
17...	0	10	20	60	.0	1	2600	20	.10	--
23...	1	10	7	40	.0	2	2400	10	.10	--
JUN										
25...	0	10	10	40	.0	1	4300	<3	.00	--
JUL										
17...	1	30	10	80	.0	1	5200	<3	.00	3
AUG										
22...	10	20	20	20	.0	1	3900	20	.00	--
SEP										
21...	2	30	4	30	.0	0	5300	10	.00	0

09306175 BLACK SULPHUR CREEK NEAR RIO BLANCO, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)
APR 18...	1	100	0	0	0	6	490	10	50	.0	9	0
SEP 21...	2	100	0	20	0	2	150	46	40	.0	6	6

DATE	SELE-NIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	GROSS ALPHA, DIS-SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS-SOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	RADIUM 226, DIS-SOLVED, RADON METHOD (PCI/L)	URANIUM DIS-SOLVED, EXTRAC-TION (UG/L)
APR 18...	1	0	20	19	7.2	6.4	4.4	5.9	3.8	.08	3.7
SEP 21...	1	0	10	--	--	--	--	--	--	--	--

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1850	1840	1580	1640	1470	1500	1430	1590	1070	---	1600	1460
2	1850	1810	1590	1680	1470	1490	1570	1720	1120	---	1580	1430
3	1800	1780	1730	1570	1510	1500	1580	1730	---	---	1570	1440
4	1800	1780	1600	1520	1500	1550	1570	1730	---	---	1540	1440
5	1820	1780	1630	1550	1530	1480	1540	1780	---	---	1460	1470
6	1830	1780	---	1520	1490	1460	1510	1690	---	---	1400	1490
7	1770	1760	1710	1550	1510	1460	1500	1620	---	---	1450	1500
8	1770	1770	1750	1610	1520	1420	1500	1520	---	---	---	1500
9	1720	1750	1860	1550	1530	1440	1480	1560	---	---	---	1530
10	1760	1740	1770	1540	1540	1420	1450	1580	---	---	1420	1540
11	1740	1700	1750	1530	1510	1350	1500	1540	---	---	1430	1540
12	1740	1690	1790	1530	1490	1350	1540	1520	---	---	1440	1550
13	1760	1650	---	1540	1460	1430	1530	1510	---	---	1460	1620
14	1810	1620	---	1550	1470	1510	1520	1510	---	---	1470	1630
15	1880	1580	---	1530	1510	1480	1470	1530	---	---	1450	1650
16	1890	1560	---	1490	1520	1410	1500	1440	---	---	1380	1650
17	1890	1540	---	1510	1470	1470	1460	1370	---	---	1360	1640
18	1910	1530	1610	1510	1440	1530	1470	1270	---	---	1420	1670
19	1890	1480	1620	1530	1450	1520	1510	1190	---	---	1380	1670
20	1840	1470	1620	1540	1480	1520	1510	1230	---	---	1390	1680
21	1820	1500	1620	1540	1480	1510	1500	1140	---	---	1420	1670
22	1820	1480	1610	1540	1470	1520	1520	1080	---	---	1400	1670
23	1790	1450	1590	1590	1490	1610	1530	---	---	---	1410	1650
24	1790	1500	1570	1540	1500	1600	1510	---	---	---	1420	1660
25	1820	1510	1570	1470	1500	1570	1500	---	---	---	1430	---
26	1830	1510	1610	1470	1500	1550	1520	---	---	---	1430	---
27	1810	1480	1570	1570	1510	1520	1590	---	---	---	1430	---
28	1820	1510	1550	1460	1550	1490	1580	1020	---	---	1450	---
29	1800	1500	1540	1460	---	1530	1580	1030	---	---	1450	---
30	1820	1570	1540	1590	---	1540	1590	1030	---	---	1470	---
31	1820	---	1600	1510	---	1470	---	---	---	1530	1460	---

09306175 BLACK SULPHUR CREEK NEAR RIO BLANCO, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	15.0	8.0	13.5	8.0	6.0	2.0	3.0	1.5	3.0	1.5	7.5	3.5
2	15.0	7.5	13.5	8.0	3.0	.5	3.0	1.5	2.5	1.5	9.0	4.5
3	15.0	4.5	13.0	8.5	2.0	1.0	3.0	1.5	2.5	1.5	10.0	2.5
4	15.0	4.5	12.5	7.5	3.0	1.0	2.5	1.5	6.0	1.5	9.0	1.5
5	14.5	4.5	12.5	8.5	3.0	1.0	6.5	3.0	3.0	1.5	8.5	1.5
6	14.5	6.5	11.5	7.0	---	---	6.0	3.0	6.5	2.0	11.5	4.5
7	14.0	5.0	11.5	7.0	2.0	1.0	3.0	1.5	6.5	2.5	12.5	4.0
8	13.5	5.5	12.0	7.0	2.0	1.0	2.5	1.5	6.5	1.5	10.0	4.0
9	14.0	5.5	12.5	7.0	3.0	1.0	2.0	1.5	7.0	1.5	11.0	1.5
10	14.0	5.5	9.0	7.0	3.0	1.0	5.5	1.5	7.0	1.5	12.0	1.5
11	14.5	5.5	8.5	5.0	2.0	1.0	6.0	4.5	8.0	3.5	12.5	1.5
12	14.0	5.5	9.5	6.5	2.5	1.0	6.5	4.0	8.5	3.5	13.0	1.5
13	12.0	4.0	6.5	3.0	---	---	5.5	1.5	8.0	5.0	13.0	2.0
14	12.5	3.5	7.0	4.0	---	---	3.5	1.5	8.0	4.5	12.0	1.5
15	14.0	4.5	6.5	4.5	---	---	5.5	3.0	9.0	2.0	13.0	2.5
16	13.0	5.5	7.5	4.0	---	---	7.0	3.0	9.0	3.5	12.5	3.5
17	12.5	6.5	7.0	2.5	---	---	5.5	2.0	9.5	3.0	13.5	3.5
18	13.5	8.0	7.0	2.0	6.5	5.5	7.5	4.5	8.5	1.5	11.0	4.0
19	14.0	7.0	8.0	2.0	6.5	4.0	7.0	2.5	7.0	2.0	13.5	5.0
20	10.5	7.5	8.0	1.0	6.0	2.5	6.0	1.5	9.5	4.0	12.0	5.5
21	10.5	9.5	7.5	1.5	5.5	1.5	4.5	1.5	7.0	3.5	10.5	5.0
22	9.5	7.5	7.5	2.0	5.5	1.5	4.5	1.5	4.5	2.0	11.0	4.0
23	12.0	7.5	7.0	1.0	5.5	3.0	2.5	1.5	6.5	1.5	13.5	2.5
24	11.5	7.5	6.5	1.0	6.0	2.5	3.0	1.5	9.5	1.5	16.0	2.5
25	12.5	7.5	7.0	1.5	5.5	1.5	5.5	1.5	9.0	1.5	15.0	3.0
26	13.0	8.0	7.0	2.0	2.5	1.5	3.5	1.5	7.5	2.0	13.5	3.5
27	13.0	8.0	7.0	.5	4.0	2.0	3.5	1.5	8.0	3.5	10.5	5.0
28	13.0	8.0	4.0	.5	6.0	2.5	2.5	1.5	9.5	1.5	13.5	6.0
29	12.5	8.5	6.5	2.0	5.0	1.5	2.0	1.5	---	---	9.0	6.0
30	11.5	9.0	7.0	3.0	4.5	1.5	3.0	1.5	---	---	14.0	5.0
31	13.0	8.0	---	---	2.0	1.5	3.5	1.5	---	---	11.0	3.5

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	11.0	3.0	15.0	8.0	19.0	6.5	19.0	10.5	21.5	9.0	19.5	7.0
2	13.5	1.5	11.5	7.0	19.5	6.5	20.0	10.5	21.5	9.0	19.0	7.5
3	14.0	1.5	10.5	5.5	19.0	7.5	16.0	9.5	21.0	8.5	20.0	7.5
4	12.0	2.0	20.0	3.5	19.0	9.0	18.0	9.0	21.5	9.0	19.5	7.5
5	17.5	4.5	17.5	6.5	20.0	8.5	18.5	8.5	22.0	9.0	20.0	7.0
6	18.5	3.5	15.0	5.5	19.0	9.5	11.5	9.0	21.0	11.5	21.0	7.5
7	17.5	4.0	8.0	3.5	15.5	10.5	20.0	8.5	19.5	11.5	19.0	7.5
8	19.5	3.5	11.0	2.0	11.5	9.0	18.5	9.0	20.0	11.5	17.0	7.5
9	14.0	4.0	13.0	4.0	17.0	7.5	19.5	8.5	20.0	11.5	17.5	8.0
10	8.5	4.0	14.0	4.0	21.0	8.0	19.5	8.5	21.0	11.0	16.5	10.0
11	10.5	3.5	12.5	3.5	21.5	9.5	20.5	9.0	21.0	9.5	17.0	8.0
12	14.0	1.5	20.5	1.0	22.5	10.0	21.0	9.5	19.0	10.0	17.5	6.5
13	15.0	2.0	21.5	4.5	22.0	11.0	21.0	10.0	19.5	11.0	14.0	6.0
14	18.0	4.0	18.0	5.5	21.0	11.5	21.0	10.0	13.5	10.0	17.0	6.5
15	20.0	4.5	19.5	5.5	20.5	11.0	19.0	11.5	14.5	11.5	17.0	5.0
16	21.0	4.5	17.0	7.5	20.5	9.5	20.0	11.0	16.0	10.5	18.0	5.5
17	19.5	6.0	21.0	6.5	20.0	9.0	20.5	11.0	14.5	8.0	17.0	5.5
18	18.0	6.0	19.0	8.0	16.0	10.0	20.5	11.0	14.0	8.5	18.0	5.0
19	17.5	5.5	22.5	7.0	14.5	9.0	20.0	10.0	13.0	9.0	17.0	6.5
20	19.5	3.0	22.5	7.5	19.5	8.0	16.0	10.0	12.5	9.0	15.5	7.5
21	18.0	4.5	22.0	8.5	20.0	8.0	17.5	10.5	18.0	7.5	16.0	7.0
22	18.0	5.0	22.5	7.5	20.5	8.5	17.5	11.0	18.0	7.0	16.0	6.5
23	19.0	5.5	22.5	8.5	21.0	9.5	18.0	11.0	18.0	7.5	17.0	6.5
24	17.5	7.5	14.5	9.5	20.5	9.0	20.0	10.5	19.0	8.5	---	---
25	17.0	7.0	18.5	10.0	20.0	9.0	20.0	10.0	17.5	8.0	---	---
26	21.0	4.0	22.5	9.0	19.5	9.5	17.0	10.0	18.5	8.0	---	---
27	19.5	4.0	17.5	9.0	18.5	9.5	18.0	9.5	19.0	7.5	---	---
28	17.0	5.0	17.5	10.0	18.5	9.5	20.5	10.0	19.5	8.5	---	---
29	19.0	3.5	14.5	9.5	22.0	9.5	20.0	9.0	20.0	7.5	---	---
30	19.0	4.5	17.5	7.0	19.0	11.0	20.5	8.5	15.0	8.0	---	---
31	---	---	17.5	7.0	---	---	20.5	9.0	19.0	8.0	---	---

09306175 BLACK SULPHUR CREEK NEAR RIO BLANCO, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	1.5	70	.28	4.5	58	.70	6.4	---	1.5
2	1.4	72	.27	4.7	40	.51	6.4	---	1.5
3	2.2	84	.50	4.4	40	.48	4.1	---	1.0
4	2.2	86	.51	4.1	---	.40	6.0	---	1.5
5	1.8	100	.49	4.1	---	.40	3.3	---	.70
6	2.0	104	.56	4.3	---	.75	3.5	---	.85
7	4.2	---	.90	4.5	---	1.0	3.3	---	.70
8	4.0	---	.95	4.4	83	.99	2.2	---	.25
9	4.0	---	.80	4.4	---	.95	2.9	---	.55
10	4.0	---	.75	4.3	---	.90	3.5	---	.86
11	4.0	54	.58	4.8	---	1.5	3.7	115	1.1
12	3.8	40	.41	8.6	---	2.0	4.1	---	1.5
13	3.8	145	1.5	7.2	59	1.1	4.1	---	1.5
14	2.6	182	1.3	6.8	---	1.5	3.7	---	1.0
15	1.9	232	1.2	6.4	---	1.0	4.1	---	1.5
16	2.5	215	1.5	6.8	---	1.5	4.9	---	2.0
17	2.2	215	1.3	6.8	---	1.5	4.9	---	2.0
18	2.2	370	2.2	6.4	---	1.0	6.0	---	3.0
19	2.5	355	2.4	6.4	---	1.0	6.4	---	3.5
20	3.7	156	1.6	6.0	---	1.0	6.4	---	3.5
21	4.0	159	1.7	6.0	---	1.0	6.4	210	3.6
22	4.2	135	1.5	6.0	---	1.0	6.4	---	3.5
23	4.2	170	1.9	6.0	---	1.0	6.4	---	3.5
24	4.5	142	1.7	6.0	---	1.0	6.4	---	3.5
25	4.8	55	.71	6.0	---	1.0	6.4	---	3.5
26	4.6	---	.60	6.0	---	1.0	5.3	---	2.5
27	4.6	---	.60	6.0	---	1.0	6.0	---	3.5
28	4.9	---	1.0	6.0	---	1.0	6.4	---	4.5
29	4.6	---	.75	6.4	---	1.5	6.8	---	5.5
30	4.9	---	1.0	6.4	---	1.4	6.8	---	5.5
31	4.6	60	.75	---	---	---	8.0	---	8.0
TOTAL	106.4	---	32.21	170.7	---	31.08	161.2	---	77.11

09306175 BLACK SULPHUR CREEK NEAR RIO BLANCO, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JANUARY			FEBRUARY			MARCH	
1	6.8	---	5.5	4.1	---	2.5	4.8	---	2.5
2	4.9	---	2.0	5.3	---	5.0	5.5	---	3.0
3	5.3	---	2.5	5.6	---	5.5	5.4	---	3.0
4	6.4	255	4.4	6.0	---	6.0	4.7	---	2.5
5	6.0	---	3.0	5.3	---	5.0	5.3	---	3.0
6	6.0	---	3.0	5.3	---	5.0	6.3	---	6.5
7	4.9	---	2.0	4.6	---	3.5	6.3	---	6.5
8	3.5	---	.90	4.6	300	3.7	7.0	---	9.5
9	4.1	---	1.5	4.6	324	4.0	6.1	---	6.0
10	4.9	---	2.0	5.3	372	5.3	6.4	---	7.0
11	5.6	---	2.5	5.6	316	4.8	6.8	---	9.0
12	5.6	---	2.5	6.8	282	5.2	7.1	---	10
13	4.9	---	2.0	7.6	334	6.9	7.8	800	17
14	4.9	---	2.0	9.0	286	6.9	7.8	---	15
15	5.6	---	2.5	9.0	337	8.2	7.7	---	15
16	5.6	---	2.5	9.0	341	8.3	8.5	---	20
17	5.6	---	2.5	8.5	323	7.4	7.5	633	13
18	5.6	---	2.5	8.5	424	9.7	7.1	434	8.3
19	5.6	155	2.3	7.6	276	5.7	6.6	400	7.1
20	5.6	---	2.5	7.2	251	4.9	6.9	423	7.9
21	4.9	---	2.0	6.4	349	6.0	6.9	374	7.0
22	5.3	---	2.5	6.0	232	3.8	6.8	414	7.6
23	3.7	270	2.7	5.6	360	5.4	6.4	---	7.0
24	4.1	274	3.0	5.3	273	3.9	6.4	---	7.0
25	6.0	504	8.2	5.3	161	2.3	7.2	---	10
26	5.3	---	5.0	5.3	---	2.5	7.2	504	9.8
27	3.7	---	2.0	5.3	190	2.7	6.8	423	7.8
28	4.4	---	3.0	4.9	---	2.5	6.4	477	8.2
29	3.7	---	2.0	---	---	---	6.0	477	7.7
30	2.5	---	.70	---	---	---	6.0	---	7.0
31	2.7	135	.98	---	---	---	6.0	---	7.0
TOTAL	153.7	---	82.68	173.6	---	142.6	203.7	---	257.9

09306175 BLACK SULPHUR CREEK NEAR RIO BLANCO, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	5.3	---	4.5	2.9	38	.30	37	1200	120
2	5.3	330	4.7	2.7	30	.22	33	1040	93
3	5.3	---	4.5	3.7	77	.77	29	1100	86
4	5.3	---	4.5	3.5	68	.64	29	1100	86
5	4.9	308	4.1	3.3	47	.42	25	---	60
6	5.3	349	5.0	4.1	18	.20	22	---	45
7	5.3	323	4.6	6.4	176	3.0	21	718	41
8	5.3	---	4.5	8.0	555	12	21	---	40
9	5.6	316	4.8	9.0	720	17	22	---	45
10	6.4	320	5.5	9.5	743	19	19	---	35
11	6.4	344	5.9	10	578	16	18	---	30
12	6.4	---	5.5	10	585	16	18	---	30
13	6.8	316	5.8	11	458	14	16	---	25
14	6.8	324	5.9	11	434	13	16	---	25
15	6.4	272	4.7	11	350	10	15	513	21
16	6.4	344	5.9	13	---	15	14	477	18
17	6.4	344	5.9	14	770	29	13	468	16
18	6.4	320	5.5	15	813	33	12	346	11
19	6.0	296	4.8	18	1070	52	9.8	366	9.7
20	5.6	288	4.4	20	1240	67	9.6	272	7.1
21	5.6	268	4.1	26	1690	119	9.4	332	8.4
22	4.9	232	3.1	28	1530	116	12	221	7.2
23	4.1	---	2.0	38	2000	205	13	230	8.1
24	4.1	---	2.0	41	1820	201	16	213	9.2
25	4.1	---	2.0	45	1680	204	22	168	10
26	4.6	---	3.0	47	1690	214	33	216	19
27	3.7	80	.80	48	1610	209	36	228	22
28	3.9	264	2.8	50	1560	211	29	189	15
29	3.9	128	1.3	48	1520	197	20	---	10
30	3.9	144	1.5	45	1440	175	15	---	7.0
31	---	---	---	40	1280	138	---	---	---
TOTAL	160.4	---	123.60	642.1	---	2307.55	604.8	---	959.7

09306175 BLACK SULPHUR CREEK NEAR RIO BLANCO, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JULY			AUGUST			SEPTEMBER	
1	11	---	4.5	11	135	4.0	10	---	2.5
2	9.5	---	4.0	12	---	4.0	10	---	2.5
3	10	---	4.0	12	216	7.0	9.5	---	2.5
4	11	---	4.5	13	---	7.5	9.0	---	2.0
5	11	---	4.5	18	---	10	8.5	---	2.0
6	9.5	198	5.1	17	214	9.8	7.6	84	1.7
7	8.5	170	3.9	17	---	10	7.2	100	1.9
8	9.0	306	7.4	17	243	11	7.2	62	1.2
9	8.5	272	6.2	16	153	6.6	7.2	50	.97
10	7.6	176	3.6	15	200	8.1	6.4	---	.70
11	7.6	180	3.7	13	250	8.8	6.0	---	.65
12	9.0	150	3.6	13	450	16	5.6	---	.60
13	9.0	98	2.4	12	450	15	4.9	23	.30
14	10	210	5.7	12	---	10	4.9	24	.32
15	12	273	8.8	12	250	8.1	5.3	15	.21
16	12	247	8.0	14	210	7.9	5.6	14	.21
17	11	108	3.2	15	289	12	5.6	14	.21
18	10	138	3.7	12	220	7.1	5.6	33	.50
19	9.0	102	2.5	12	185	6.0	4.6	50	.62
20	10	176	4.8	13	175	6.1	3.9	---	.50
21	11	214	6.4	13	155	5.4	3.9	68	.72
22	10	185	5.0	10	162	4.4	3.9	---	.50
23	9.5	160	4.1	10	---	4.5	3.9	---	.50
24	9.0	175	4.3	9.5	170	4.4	2.2	---	.25
25	8.0	99	2.1	9.5	140	3.6	1.3	---	.05
26	9.0	158	3.8	9.0	118	2.9	2.2	---	.25
27	8.5	162	3.7	9.0	105	2.6	2.1	---	.20
28	7.6	140	2.9	8.5	85	2.0	1.7	---	.10
29	8.0	108	2.3	9.0	82	2.0	1.3	---	.05
30	10	216	6.2	10	---	2.5	1.4	---	.05
31	13	250	8.8	10	---	2.5	---	---	---
TOTAL	298.8	---	143.7	383.5	---	211.8	158.5	---	24.76
YEAR	3217.4		4394.69						

09306200 PICEANCE CREEK BELOW RYAN GULCH, NEAR RIO BLANCO, CO

LOCATION.--Lat 39°55'16", long 108°17'49", in sec.32, T.1 S., R.97 W., Rio Blanco County, Hydrologic Unit 14050006, on left bank at downstream side of bridge, 40 ft (12 m) downstream from Ryan Gulch, and 23 mi (37 km) northwest of Rio Blanco.

DRAINAGE AREA.--506 mi^2 (1,310 km^2), revised.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1964 to current year.

REVISED RECORDS.--WRD Colo. 1973: 1972(M).

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 6,070 ft (1,850 m), from topographic map.

REMARKS.--Records good except those for winter period, which are fair. Diversions for irrigation above station.

AVERAGE DISCHARGE.--15 years, 19.2 ft^3/s (0.543 m^3/s), 13,910 acre-ft/yr (17.2 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 400 ft^3/s (11 m^3/s), estimated, Mar. 9, 1966, gage height, 6.23 ft (1.899 m); minimum daily, 0.21 ft^3/s (0.006 m^3/s) May 21, 1972.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 130 ft^3/s (3.68 m^3/s) at 1700 May 21, gage height, 4.61 ft (1.405 m), no peak above base of 100 ft^3/s (2.8 m^3/s); minimum daily, 4.9 ft^3/s (0.138 m^3/s) Jan. 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	12	20	13	12	19	24	51	95	15	25	30
2	10	12	20	13	13	19	23	51	88	9.6	27	29
3	9.2	12	20	13	14	19	22	60	82	8.9	28	27
4	8.3	12	20	12	15	19	22	60	81	11	27	23
5	8.6	12	20	12	16	20	23	53	68	12	29	22
6	8.3	12	20	11	16	20	23	53	62	11	34	22
7	9.9	14	20	11	17	20	22	65	60	10	35	22
8	9.9	16	20	11	18	22	24	82	56	11	40	22
9	10	17	20	10	19	20	29	82	62	12	37	22
10	10	18	19	10	20	20	42	82	60	12	41	21
11	9.9	21	19	9.4	20	20	40	82	55	11	39	21
12	9.9	35	19	9.0	21	22	34	91	51	8.3	40	22
13	10	26	19	8.6	22	23	34	98	46	8.6	40	20
14	10	24	19	8.2	23	24	39	105	50	9.2	40	17
15	9.2	23	19	7.8	22	24	38	104	47	11	39	17
16	9.2	24	19	7.4	20	27	45	105	39	11	39	16
17	8.9	24	19	7.0	20	28	49	106	35	11	41	12
18	8.6	22	19	6.6	20	25	55	98	33	12	39	12
19	9.2	22	19	6.2	20	23	57	115	31	12	40	12
20	9.9	22	18	5.8	20	22	55	123	33	12	40	12
21	10	22	18	5.4	20	22	49	127	29	15	38	12
22	10	21	17	5.0	19	23	47	117	24	14	34	11
23	12	20	17	4.9	19	22	46	119	24	15	34	10
24	12	21	17	5.7	19	22	46	125	25	16	33	9.0
25	12	21	16	6.5	18	22	48	128	22	14	32	6.0
26	12	21	16	7.4	18	23	50	126	20	15	34	6.0
27	12	21	15	8.2	19	23	49	124	19	23	34	7.0
28	12	22	15	9.0	19	23	50	123	19	22	33	7.0
29	12	20	15	9.8	---	25	52	119	19	18	33	7.0
30	12	20	14	11	---	24	54	119	18	19	33	8.0
31	12	---	14	11	---	24	---	106	---	22	32	---
TOTAL	317.0	589	562	275.9	519	689	1191	3000	1353	411.6	1090	484.0
MEAN	10.2	19.6	18.1	8.90	18.5	22.2	39.7	96.8	45.1	13.3	35.2	16.1
MAX	12	35	20	13	23	28	57	128	95	23	41	30
MIN	8.3	12	14	4.9	12	19	22	51	18	8.3	25	6.0
AC-FT	629	1170	1110	547	1030	1370	2360	5950	2680	816	2160	960

CAL YR 1978 TOTAL 6067.6 MEAN 16.6 MAX 71 MIN 2.0 AC-FT 12040
WTR YR 1979 TOTAL 10481.5 MEAN 28.7 MAX 128 MIN 4.9 AC-FT 20790

09306200 PICEANCE CREEK BELOW RYAN GULCH, NEAR RIO BLANCO, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 1970 to current year.

PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT DISCHARGE: October 1972 to current year.

INSTRUMENTATION.--Automatic pumping sediment sampler since October 1972.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SEDIMENT CONCENTRATIONS: Maximum daily, 21,700 mg/L July 20, 1977; minimum daily, 9 mg/L Sept. 17, 26, 1978.
SEDIMENT LOADS: Maximum daily, 4,160 tons (3,770 t) July 20, 1977; minimum daily, 0.19 ton (0.17 t) May 10, 1977.

EXTREMES FOR CURRENT YEAR.--
SEDIMENT CONCENTRATIONS: Maximum daily, 4,500 mg/L May 18; minimum daily, 11 mg/L Oct. 21, 22.
SEDIMENT LOADS: Maximum daily, 1,290 tons (1,170 t) May 19; minimum daily, 0.23 ton (0.21 t) Sept. 25.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)
OCT										
24...	1015	E12	1800	8.1	4.0	--	11.7	750	0	620
NOV										
03...	1400	E12	1800	8.7	10.5	2.0	13.1	660	44	615
21...	1300	21	1500	8.1	4.0	--	12.6	590	0	480
DEC										
11...	1200	16	1650	7.6	.5	--	12.0	580	0	480
JAN										
23...	1050	4.9	1950	8.0	.0	--	10.6	760	0	620
FEB										
27...	1435	19	1600	8.3	4.0	--	10.4	530	0	430
MAR										
13...	1345	E23	1410	8.0	8.0	--	9.3	600	0	492
29...	1225	E25	1500	8.6	6.5	--	9.7	610	0	500
APR										
18...	1230	E55	870	7.9	11.0	--	8.5	360	0	300
25...	1645	E48	1020	8.1	12.5	--	8.1	490	0	402
MAY										
17...	1015	112	890	8.0	10.0	--	8.5	390	0	320
JUN										
25...	1500	E22	1700	8.2	21.0	--	8.2	650	0	530
JUL										
12...	1400	E8.3	1950	8.0	19.0	--	8.2	780	0	640
16...	1300	E11	2000	8.2	18.0	6.0	8.1	810	0	660
AUG										
21...	1240	38	1420	8.3	14.0	--	8.3	570	0	470
SEP										
04...	1430	E23	1370	8.3	17.0	--	8.0	560	--	--
18...	1300	12	1650	7.8	14.0	--	8.4	--	0	--
27...	1410	E7.0	1870	8.3	18.0	--	9.5	760	--	--

E ESTIMATED.

09306200 PICEANCE CREEK BELOW RYAN GULCH, NEAR RIO BLANCO, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	COLIFORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, (COLS. PER 100 ML)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)
OCT 24...	1015	--	--	--	640	21	88	100	250	4.3	3.7
NOV 21...	1300	--	--	--	520	36	80	77	170	3.3	2.9
DEC 11...	1200	--	--	--	530	58	82	79	180	3.4	3.5
JAN 23...	1050	--	--	--	580	0	83	89	240	4.4	4.4
FEB 27...	1435	--	--	--	530	95	84	77	150	2.8	2.8
MAR 29...	1225	--	--	--	540	40	90	76	160	3.0	2.9
APR 18...	1230	10000	K8500	2500	300	8	55	40	97	2.4	2.8
MAY 17...	1015	--	--	--	340	15	66	41	88	2.1	3.1
JUN 25...	1500	--	--	--	570	34	69	95	180	3.3	4.0
JUL 16...	1300	--	--	--	720	59	90	120	260	4.2	4.0
AUG 21...	1240	--	--	--	500	29	73	76	160	3.1	3.1
SEP 18...	1300	--	--	--	540	79	74	85	180	3.4	3.0

DATE	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)
OCT 24...	510	18	.8	16	1360	1.85	44.8	.10	.01	.11	.14
NOV 21...	370	12	.7	17	1030	1.40	58.4	.33	.01	.34	.40
DEC 11...	390	13	.8	18	1060	1.44	45.8	.49	.01	.50	.54
JAN 23...	440	19	.9	19	1280	1.74	16.9	.37	.02	.39	.38
FEB 27...	360	20	.7	16	977	1.33	50.1	.33	.02	.35	.37
MAR 29...	360	12	.7	13	1020	1.39	77.7	.13	.02	.15	.17
APR 18...	190	9.3	.5	11	588	.80	87.2	.63	.06	.69	.70
MAY 17...	180	9.9	.5	14	603	.82	182	1.7	.04	1.7	1.6
JUN 25...	430	16	.7	17	1140	1.55	67.6	.05	.02	.07	.01
JUL 16...	530	19	.8	20	1450	1.97	43.0	.01	.02	.03	.00
AUG 21...	340	14	.6	9.0	961	1.31	98.6	.42	.04	.46	.74
SEP 18...	420	13	.8	18	1070	1.46	34.7	.17	.02	.19	.17

K BASED ON NON-IDEAL COLONY COUNT.

09306200 PICEANCE CREEK BELOW RYAN GULCH, NEAR RIO BLANCO, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM DIS-SOLVED (UG/L AS CD)
OCT 24...	.01	--	.36	.37	.04	.03	.00	3	0	260	0
NOV 21...	.02	--	.40	.42	.09	.03	.03	2	70	210	3
DEC 11...	.05	.02	.40	.45	.11	.04	.03	2	70	230	<1
JAN 23...	.10	--	.49	.59	.14	.07	.04	2	80	250	2
FEB 27...	.06	--	.90	.96	.12	.05	.01	2	100	180	1
MAR 29...	.03	--	.75	.78	.12	.03	.00	2	100	170	0
APR 18...	.09	--	4.0	4.1	.94	.09	.00	2	0	130	0
MAY 17...	.03	--	4.9	4.9	2.2	.06	.00	3	100	110	0
JUN 25...	.02	--	.41	.43	.03	.03	.01	7	100	250	<1
JUL 16...	.02	--	.54	.56	.06	.07	.05	3	0	200	0
AUG 21...	.03	--	.41	.44	.20	.04	.01	3	90	200	<1
SEP 18...	.03	--	.47	.50	.06	.02	.01	3	80	230	<1

DATE	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	ZINC, DIS-SOLVED (UG/L AS ZN)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	PHENOLS (UG/L)
OCT 24...	1	30	10	90	.0	1	3900	10	.10	--
NOV 21...	2	70	10	70	.0	2	3000	10	.20	--
DEC 11...	3	30	10	60	.0	2	3000	10	.10	0
JAN 23...	2	20	20	80	.0	1	3200	4	.00	--
FEB 27...	2	30	20	0	.0	1	2900	20	.00	--
MAR 29...	0	30	10	50	.0	1	2500	20	.00	--
APR 18...	2	0	8	30	.0	1	1400	10	.00	0
MAY 17...	0	10	4	20	.0	2	1300	10	.10	--
JUN 25...	0	40	10	30	.0	1	3500	<3	.00	--
JUL 16...	2	20	8	90	.0	0	4000	20	.00	--
AUG 21...	2	10	20	10	.0	1	830	<3	.00	1
SEP 18...	1	<10	20	10	.0	1	3400	<3	.00	1

09306200 PICEANCE CREEK BELOW RYAN GULCH, NEAR RIO BLANCO, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)
APR								
18...	16	1200	0	110	17	67	81000	48
SEP								
18...	2	0	0	10	0	1	470	1

DATE	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)
APR							
18...	2400	.0	2	68	3	0	260
SEP							
18...	20	.0	6	2	1	0	0

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	10	---	1.0	12	161	5.2	20	189	10
2	10	---	1.0	12	70	2.3	20	225	12
3	9.2	---	.95	12	46	1.5	20	---	10
4	8.3	25	.56	12	39	1.3	20	---	9.5
5	8.6	30	.70	12	63	2.0	20	---	8.5
6	8.3	29	.65	12	42	1.4	20	---	8.5
7	9.9	40	1.1	14	35	1.3	20	---	8.5
8	9.9	36	.96	16	88	3.8	20	---	8.0
9	10	61	1.6	17	88	4.0	20	---	7.0
10	10	57	1.5	18	72	3.5	19	---	5.0
11	9.9	20	.53	21	---	7.0	19	95	4.8
12	9.9	18	.48	35	---	15	19	---	5.5
13	10	20	.54	26	---	9.0	19	---	6.0
14	10	22	.59	24	108	7.0	19	---	6.5
15	9.2	25	.62	23	128	7.9	19	---	7.0
16	9.2	49	1.2	24	---	9.0	19	---	7.5
17	8.9	63	1.5	24	---	9.0	19	---	8.0
18	8.6	39	.91	22	130	7.7	19	---	8.5
19	9.2	27	.67	22	---	8.0	19	---	9.0
20	9.9	18	.48	22	---	7.5	18	---	8.5
21	10	11	.30	22	130	7.7	18	181	8.8
22	10	11	.30	21	---	7.5	17	176	8.1
23	12	18	.58	20	---	7.0	17	154	7.1
24	12	16	.52	21	171	9.7	17	175	8.0
25	12	18	.58	21	252	14	16	180	7.8
26	12	42	1.4	21	162	9.2	16	---	8.0
27	12	62	2.0	21	113	6.4	15	---	6.5
28	12	---	2.5	22	---	9.5	15	---	6.0
29	12	---	3.0	20	122	6.6	15	---	6.0
30	12	---	3.5	20	135	7.3	14	---	5.0
31	12	---	4.5	---	---	---	14	---	5.0
TOTAL	317.0	---	36.72	589	---	198.3	562	---	234.6

09306200 PICEANCE CREEK BELOW RYAN GULCH, NEAR RIO BLANCO, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JANUARY			FEBRUARY			MARCH	
1	13	---	3.0	12	97	3.1	19	350	18
2	13	---	3.0	13	110	3.9	19	410	21
3	13	84	2.9	14	143	5.4	19	345	18
4	12	112	3.6	15	195	7.9	19	540	28
5	12	---	3.5	16	188	8.1	20	---	25
6	11	122	3.6	16	252	11	20	---	25
7	11	130	3.9	17	324	15	20	486	26
8	11	---	4.0	18	222	11	22	477	28
9	10	---	3.5	19	216	11	20	441	24
10	10	---	3.5	20	270	15	20	324	17
11	9.4	---	3.5	20	348	19	20	396	21
12	9.0	---	3.5	21	540	31	22	423	25
13	8.6	---	3.5	22	1200	71	23	563	35
14	8.2	---	3.5	23	1080	67	24	540	35
15	7.8	---	3.5	22	1740	103	24	384	25
16	7.4	---	3.5	20	1020	55	27	---	35
17	7.0	---	3.5	20	743	40	28	665	50
18	6.6	192	3.4	20	605	33	25	---	30
19	6.2	308	5.2	20	506	27	23	440	27
20	5.8	407	6.4	20	495	27	22	408	24
21	5.4	412	6.0	20	418	23	22	416	25
22	5.0	264	3.6	19	390	20	23	423	26
23	4.9	270	3.6	19	643	33	22	378	22
24	5.7	252	3.9	19	570	29	22	369	22
25	6.5	150	2.6	18	---	20	22	432	26
26	7.4	156	3.1	18	---	20	23	473	29
27	8.2	318	7.0	19	410	21	23	490	30
28	9.0	156	3.8	19	400	21	23	480	30
29	9.8	156	4.1	---	---	---	25	600	40
30	11	---	5.0	---	---	---	24	510	33
31	11	195	5.8	---	---	---	24	460	30
TOTAL	275.9	---	122.5	519	---	751.4	689	---	850

09306200 PICEANCE CREEK BELOW RYAN GULCH, NEAR RIO BLANCO, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	24	450	29	51	1300	179	95	2350	603
2	23	440	27	51	1250	172	88	2300	546
3	22	400	24	60	1580	256	82	2400	531
4	22	450	27	60	1440	233	81	2420	529
5	23	480	30	53	1120	160	68	1700	312
6	23	570	35	53	1580	226	62	3300	552
7	22	420	25	66	---	380	60	1260	204
8	24	460	30	82	2740	607	56	1100	166
9	29	1300	102	82	3060	677	62	1210	203
10	42	2450	278	82	2250	498	60	935	151
11	40	2050	221	82	2070	458	55	715	106
12	34	1050	96	91	2520	619	51	720	99
13	34	900	83	98	3780	1000	46	---	80
14	39	1100	116	105	4050	1150	50	---	95
15	38	1400	144	104	4410	1240	47	618	78
16	45	2000	243	105	4320	1220	39	636	67
17	49	2400	318	106	4360	1250	35	480	45
18	55	2900	431	98	4500	1190	33	390	35
19	57	3050	469	115	4140	1290	31	390	33
20	55	2200	327	123	3740	1240	33	338	30
21	49	1800	238	127	3280	1120	29	286	22
22	47	1600	203	117	3510	1110	24	252	16
23	46	1600	199	119	3420	1100	24	336	22
24	46	1650	205	125	2700	911	25	298	20
25	48	1750	227	128	2790	964	22	225	13
26	50	1600	216	126	2700	919	20	189	10
27	49	1450	192	124	---	900	19	---	8.5
28	50	1420	192	123	---	900	19	---	8.5
29	52	1450	204	119	3020	970	19	---	8.5
30	54	1380	201	119	2600	835	18	---	7.5
31	---	---	---	106	2750	787	---	---	---
TOTAL	1191	---	5132	3000	---	24561	1353	---	4601.0

09306200 PICEANCE CREEK BELOW RYAN GULCH, NEAR RIO BLANCO, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JULY			AUGUST			SEPTEMBER	
1	15	---	6.0	25	210	14	30	416	34
2	9.6	---	3.0	27	162	12	29	319	25
3	8.9	---	2.5	28	282	21	27	338	25
4	11	---	3.5	27	336	24	23	293	18
5	12	---	4.0	29	288	23	22	254	15
6	11	108	3.2	34	552	51	22	234	14
7	10	---	3.0	35	904	85	22	247	15
8	11	---	3.5	40	792	86	22	247	15
9	12	---	4.0	37	1060	106	22	198	12
10	12	120	3.9	41	1140	126	21	228	13
11	11	100	3.0	39	---	90	21	246	14
12	8.3	98	2.2	40	---	100	22	252	15
13	8.6	97	2.3	40	---	70	20	198	11
14	9.2	94	2.3	40	655	71	17	204	9.4
15	11	94	2.8	39	682	72	17	184	8.4
16	11	99	2.9	39	644	68	16	106	4.6
17	11	116	3.4	41	908	101	12	50	1.6
18	12	108	3.5	39	936	99	12	52	1.7
19	12	121	3.9	40	660	71	12	60	1.9
20	12	85	2.8	40	648	70	12	50	1.6
21	15	113	4.6	38	636	65	12	54	1.7
22	14	99	3.7	34	696	64	11	54	1.6
23	15	126	5.1	34	768	71	10	47	1.3
24	16	132	5.7	33	534	48	9.0	26	.63
25	14	84	3.2	32	672	58	6.0	14	.23
26	15	122	4.9	34	780	72	6.0	18	.29
27	23	270	17	34	676	62	7.0	35	.66
28	22	210	12	33	520	46	7.0	29	.55
29	18	120	5.8	33	780	69	7.0	16	.30
30	19	150	7.7	33	442	39	8.0	16	.35
31	22	174	10	32	455	39	---	---	---
TOTAL	411.6	---	145.4	1090	---	1993	484.0	---	262.81
YEAR	10481.5		38888.73						

09306202 HORSE DRAW NEAR RANGELY, CO

LOCATION.--Lat 39°55'59", long 108°18'59", in NE¼SE¼ sec.30., T.1 S., R.97 W., Rio Blanco County, Hydrologic Unit 14050007, on right bank 1.2 mi (1.9 km) upstream from mouth, 3.4 mi (5.5 km) southwest of Square S Ranch, and 28 mi (45 km) southeast of Rangely.

DRAINAGE AREA.--1.47 mi² (3.81 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1977 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,280 ft (1,914 m), from topographic map.

REMARKS.--Records excellent. No regulation or diversions.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11 ft³/s (0.31 m³/s) Sept. 11, gage height, 1.55 ft (0.472 m); no flow most days each year.

EXTREMES FOR CURRENT YEAR.--No flow for entire year.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1976 to current year.

INSTRUMENTATION.--Water-quality monitor since August 1977. Pumping sediment sampler since August 1977.

REMARKS.--No flow during 1979 water year.

09306203 HORSE DRAW AT MOUTH, NEAR RANGELY, CO

LOCATION.--Lat 39°56'12", long 108°17'53", in SE¼NE¼ sec.29, T.1 S., R.97 W., Rio Blanco County, Hydrologic Unit 14050007, on left bank 1,500 ft (460 m) upstream from mouth, 2.5 mi (4.0 km) southwest of Square S Ranch, and 29 mi (47 km) southeast of Rangely.

DRAINAGE AREA.--2.87 mi^2 (7.43 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1977 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,110 ft (1.862 km), from topographic map.

REMARKS.--Records excellent.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 54 ft^3/s (0.45 m^3/s), revised, July 24, 1977, gage height, 1.54 ft (0.469 m); no flow most of time.

EXTREMES FOR CURRENT YEAR.--No flow entire year.

REVISIONS.--The maximum discharge during period July to September 1977 has been revised to 54 ft^3/s (1.53 m^3/s) July 24, 1977, gage height, 1.54 ft (0.469 m); revised daily discharges, in cubic feet per second, for July and September 1977, are given below. The revised figures supersede those published in WDR-77-3.

July 24. . . . . . 1.0 July 25. . . . . . 0.04 Sept. 11. . . . . . 1.8 Sept. 12. . . . . . 0.43

Month	Total	Mean	Max	Min	AC-FT
July 1977	1.04	0.034	1.0	0.00	2.1
September 1977	2.23	0.074	1.8	0.00	4.4

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1976 to current year.

INSTRUMENTATION.--Water quality monitor since October 1976. Pumping sediment sampler since October 1976.

REMARKS.--No flow during 1979 water year.

09306222 PICEANCE CREEK AT WHITE RIVER, CO

LOCATION.--Lat 40°05'16", long 108°14'35", in SW¼NE¼ sec.2, T.1 N., R.97 W., Rio Blanco County, Hydrologic Unit 14050006, on left bank 900 ft (270 m) upstream from mouth, 1.0 mi (1.6 km) west of White River City, and 17 mi (27 km) west of Meeker.

DRAINAGE AREA.--630 mi^2 (1,632 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1964 to September 1966, October 1970 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,705 ft (1,739 m), from topographic map. Oct. 1, 1964, to Sept. 30, 1966, and Oct. 1, 1970, to July 12, 1974, at several sites 1.1 mi (1.8 km) upstream at different datums.

REMARKS.--Records fair except for winter period and those above 150 ft^3/s (4.24 m^3/s), which are poor. Diversions for irrigation of about 5,500 acres (22.3 km^2) above station.

AVERAGE DISCHARGE.--11 years, 23.9 ft^3/s (0.677 m^3/s), 17,320 acre-ft/yr (21.4 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 628 ft^3/s (17.8 m^3/s) Sept. 7, 1978, gage height, 7.04 ft (2.146 m); minimum daily discharge, 0.50 ft^3/s (0.014 m^3/s) July 21, 22, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 191 ft^3/s (5.41 m^3/s) at 0600 May 22, gage height, 4.08 ft (1.244 m), only peak above base of 100 ft^3/s (2.8 m^3/s); maximum gage height, 4.26 ft (1.298 m) May 30; minimum daily discharge, 7.4 ft^3/s (0.210 m^3/s) Oct. 6, 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.7	18	23	24	23	25	46	71	130	11	40	41
2	7.7	18	22	24	23	26	46	69	121	10	47	41
3	7.7	18	22	24	23	26	44	77	111	9.7	49	38
4	7.7	18	22	23	23	26	43	80	109	9.4	47	34
5	7.7	18	22	23	23	26	45	73	100	9.3	48	31
6	7.4	19	23	23	23	27	44	72	92	9.6	50	30
7	7.4	19	24	23	23	28	44	74	85	8.9	50	30
8	8.0	22	24	23	24	30	45	100	79	8.3	51	30
9	8.2	24	25	23	24	31	51	108	86	8.8	50	29
10	8.4	24	25	23	24	31	59	110	79	8.8	48	25
11	8.4	24	26	22	24	31	66	106	69	9.3	46	24
12	8.4	30	27	22	24	34	57	115	58	9.9	44	23
13	8.7	33	27	22	24	37	56	120	51	10	46	23
14	8.7	31	27	22	24	40	59	134	45	11	45	21
15	9.3	30	27	22	24	42	60	134	42	11	46	20
16	9.3	28	27	21	24	45	65	139	42	12	46	21
17	9.0	28	27	21	25	49	70	141	37	13	46	19
18	8.0	28	27	21	25	43	76	148	31	13	46	17
19	8.7	28	27	21	25	42	79	145	25	13	46	16
20	9.0	28	26	21	25	42	76	150	22	10	47	15
21	10	28	26	21	25	43	71	150	17	10	45	14
22	11	28	26	21	25	44	70	167	15	13	41	14
23	11	26	26	22	24	43	69	147	15	31	40	13
24	12	26	26	22	26	43	69	147	15	25	40	13
25	15	26	26	22	25	43	71	150	14	24	38	11
26	15	25	25	22	25	43	70	146	14	22	40	10
27	17	25	25	22	25	43	69	135	13	27	42	10
28	18	24	25	22	25	46	69	143	11	37	41	9.0
29	18	24	25	22	---	47	70	145	12	32	43	8.5
30	18	23	24	22	---	46	72	150	11	31	44	8.0
31	18	---	24	22	---	47	---	142	---	34	43	---
TOTAL	328.4	741	778	688	677	1169	1831	3788	1551	492.0	1395	638.5
MEAN	10.6	24.7	25.1	22.2	24.2	37.7	61.0	122	51.7	15.9	45.0	21.3
MAX	18	33	27	24	26	49	79	167	130	37	51	41
MIN	7.4	18	22	21	23	25	43	69	11	8.3	38	8.0
AC-FT	651	1470	1540	1360	1340	2320	3630	7510	3080	976	2770	1270

CAL YR 1978 TOTAL 6629.4 MEAN 18.2 MAX 102 MIN 2.0 AC-FT 13150
WTR YR 1979 TOTAL 14076.9 MEAN 38.6 MAX 167 MIN 7.4 AC-FT 27920

WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 1970 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: January 1971 to June 1974, May 1975 to current year.
WATER TEMPERATURE: January 1971 to September 1974, May 1975 to current year.
SUSPENDED-SEDIMENT DISCHARGE: March 1974 to current year.

INSTRUMENTATION.--Water-quality monitor since May 1974. Pumping sediment sampler since March 1974.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 9,500 micromhos July 16, 1972; minimum daily, 628 micromhos Apr. 3, 1978.
WATER TEMPERATURES: Maximum, 32.0°C July 14, 1978; minimum, freezing point on many days during winter months.
SEDIMENT CONCENTRATIONS: Maximum daily, 25,000 mg/L, estimated Sept. 7, 1978; minimum daily, 4 mg/L Oct. 2, 1977.
SEDIMENT LOADS: Maximum daily, 2,900 tons (2,630 t), estimated Sept. 7, 1978; minimum daily, 0.13 ton (0.09 t) June 22, 1978.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 3,620 micromhos Sept. 26; minimum, 790 micromhos May 16.
WATER TEMPERATURES: Maximum, 29.5°C July 11, 12; minimum, 0.5°C on many days during November to January, Apr. 12.
SEDIMENT CONCENTRATIONS: Maximum daily, 4,500 mg/L, estimated May 22; minimum daily, 10 mg/L Sept. 30.
SEDIMENT LOADS: Maximum daily, 2,000 tons (1,810 t), estimated May 22; minimum daily, 0.22 ton (0.20 t) Sept. 30.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (NTU)	OXYGEN, DISSOLVED (MG/L)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)
OCT										
24...	1250	E12	2800	8.2	5.5	--	11.9	1170	0	960
NOV										
03...	1430	E18	2500	8.6	10.5	--	10.8	1060	40	936
22...	1100	29	2000	8.0	1.5	--	12.2	820	0	670
DEC										
11...	1015	E26	2400	7.5	.5	--	10.4	1020	0	840
JAN										
23...	0845	E22	2520	8.1	.5	--	16.2	1230	0	1010
FEB										
27...	0900	27	2000	8.4	.5	--	11.7	840	72	810
MAR										
13...	1445	E37	1960	8.1	7.0	250	9.2	960	0	787
29...	1330	E47	2150	8.7	6.5	--	9.9	930	0	760
APR										
18...	1330	E76	1350	7.9	14.0	--	7.5	590	0	480
25...	1730	E71	1330	8.2	14.5	340	7.7	680	--	--
MAY										
17...	0900	142	1080	8.0	10.5	--	8.3	470	0	390
JUN										
25...	1615	13	2600	8.3	24.5	--	9.1	1070	0	880
JUL										
12...	1445	E9.9	2830	8.3	26.0	--	8.3	1320	--	--
16...	1345	13	3000	8.6	21.5	--	7.5	1320	47	1160
AUG										
21...	1330	E45	1700	8.4	17.0	--	7.5	730	0	600
SEP										
04...	1545	E34	1680	8.5	20.0	27	7.9	680	12	578
18...	1350	18	2200	8.0	16.5	--	8.5	--	0	820
27...	1500	10	2570	8.5	18.5	--	8.7	1150	36	1000

E ESTIMATED.

09306222 PICEANCE CREEK AT WHITE RIVER, CO--Continued

DATE	TIME	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)
OCT											
24...	1250	--	--	--	600	0	58	110	490	8.7	4.7
NOV											
22...	1100	--	--	--	510	0	68	81	290	5.6	3.6
DEC											
11...	1015	--	--	--	590	0	82	92	350	6.3	5.0
JAN											
23...	0845	--	--	--	550	0	73	89	460	8.5	5.9
FEB											
27...	0900	--	--	--	500	0	70	79	360	7.0	3.7
MAR											
29...	1330	--	--	--	510	0	72	80	350	6.8	3.5
APR											
18...	1330	4200	1000	900	370	0	60	54	200	4.5	3.1
MAY											
17...	0900	--	--	--	340	0	60	45	140	3.3	3.5
JUN											
25...	1615	--	--	--	510	0	56	90	430	8.3	4.7
JUL											
16...	1345	--	--	--	580	0	49	110	570	10	4.9
AUG											
21...	1330	--	--	--	440	0	60	70	240	5.0	3.7
SEP											
18...	1350	--	--	--	470	0	52	82	410	8.3	3.7

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)
OCT											
24...	590	52	1.2	13	1900	2.58	76.9	.00	.01	.01	.02
NOV											
22...	420	35	.9	16	1320	1.80	103	.34	.01	.35	.37
DEC											
11...	460	42	1.2	18	1560	2.12	84.2	.49	.02	.51	.57
JAN											
23...	440	62	1.4	17	1760	2.39	85.5	.40	.02	.42	.44
FEB											
27...	400	48	1.1	16	1470	2.00	107	--	--	--	.41
MAR											
29...	420	39	1.1	13	1440	1.96	132	.23	.02	.25	.27
APR											
18...	260	23	.8	12	910	1.24	179	.81	.08	.89	.84
MAY											
17...	200	17	.6	14	720	.98	276	1.4	.06	1.5	1.4
JUN											
25...	490	43	1.2	15	1660	2.26	58.3	.11	.04	.15	.11
JUL											
16...	600	67	1.4	12	2120	2.88	74.4	.00	.02	.02	.01
AUG											
21...	400	26	.8	18	1180	1.60	143	.43	.04	.47	.53
SEP											
18...	460	47	1.7	14	1570	2.14	76.3	.18	.02	.20	.18

09306222 PICEANCE CREEK AT WHITE RIVER, CO--Continued

DATE	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM DIS-SOLVED (UG/L AS CD)
OCT 24...	.01	--	.82	.83	.17	.03	.00	4	200	420	1
NOV 22...	.08	--	--	--	.36	.05	.10	3	100	320	2
DEC 11...	.11	.08	.64	.75	.15	.07	.06	3	200	350	1
JAN 23...	.23	--	.57	.80	.29	.14	.07	3	200	370	1
FEB 27...	--	--	--	--	--	--	.03	3	100	280	1
MAR 29...	.11	--	1.7	1.8	.56	.08	.00	3	100	300	0
APR 18...	.10	--	2.3	2.4	.79	.09	.03	3	0	230	0
MAY 17...	.05	--	3.8	3.8	1.4	.06	.01	3	100	160	0
JUN 25...	.02	--	.61	.63	.02	.05	.03	7	200	430	0
JUL 16...	.06	--	.84	.90	.07	.05	.05	4	100	460	1
AUG 21...	.04	--	.47	.51	.24	.07	.05	3	100	280	<1
SEP 18...	.17	--	.45	.62	4.7	.04	.04	3	200	390	0

DATE	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	ZINC, DIS-SOLVED (UG/L AS ZN)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	PHENOLS (UG/L)
OCT 24...	3	50	30	40	.0	1	3000	10	.10	--
NOV 22...	9	20	20	40	.0	2	2700	10	.10	--
DEC 11...	3	760	40	60	.0	2	3000	20	.10	0
JAN 23...	5	60	50	40	.0	1	2600	30	.00	--
FEB 27...	4	40	30	60	.0	1	2300	20	.00	--
MAR 29...	0	300	30	40	.0	1	2200	20	.00	--
APR 18...	3	40	10	10	.0	2	1800	10	.00	0
MAY 17...	0	10	10	20	.0	2	1400	10	.20	--
JUN 25...	0	10	30	0	.0	1	2700	0	.00	--
JUL 16...	2	10	30	10	.0	0	2400	10	.10	--
AUG 21...	2	20	20	4	.0	1	2300	<3	.00	0
SEP 18...	1	20	40	0	.0	1	2300	10	.10	1

09306222 PICEANCE CREEK AT WHITE RIVER, CO--Continued

DATE	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)
APR 18...	8	500	0	40	10	52	27000	45
SEP 18...	3	100	0	10	0	4	360	3

DATE	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)
APR 18...	830	.0	7	32	2	2	130
SEP 18...	20	.0	7	7	1	0	0

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3180	2610	2130	2250	---	---	2080	1420	---	2530	---	2140
2	3300	2610	2100	2440	---	---	2070	1450	---	2580	---	2090
3	3270	2620	2360	2460	---	---	2030	1370	---	2580	---	2020
4	3280	2580	2230	2190	---	---	2010	1330	---	2600	---	2200
5	3280	2560	2020	2030	---	---	2000	1420	---	2560	---	2320
6	3350	2540	2220	1770	---	---	1950	1450	---	2520	---	2280
7	3370	2450	2320	1950	2050	---	1910	1370	---	2540	---	---
8	3330	2360	2410	2000	---	---	1880	1280	---	2590	---	---
9	3250	2300	2600	---	---	---	1790	1300	---	2520	---	---
10	3230	2220	2490	---	---	---	1510	1300	---	2520	---	---
11	3220	2100	2390	---	---	---	1300	1290	---	2590	---	---
12	3230	2110	2390	---	---	---	1720	1230	---	2720	---	---
13	3230	2010	2280	---	---	---	1890	1180	---	2770	---	---
14	3200	2110	2400	---	---	2180	1900	1140	---	2830	---	---
15	3210	2060	2310	---	---	2220	1800	1110	---	2880	---	---
16	3210	2040	2190	---	---	2250	1560	1000	---	2900	1500	---
17	3240	2020	2130	---	1950	2150	1320	1200	---	2900	1480	2090
18	3310	2000	1960	2000	---	2080	1220	1000	---	2910	1430	2350
19	3300	2010	1840	---	---	2140	1100	---	---	2890	1440	2360
20	3290	2000	1850	---	---	2290	1240	---	---	3210	1460	2300
21	3280	1940	1920	---	---	---	1340	1400	2310	3220	1320	2320
22	3290	2050	2050	---	---	---	1370	---	2360	2950	---	2270
23	3160	1900	2060	2350	---	---	1350	1200	2390	2690	1800	2300
24	3080	1750	1960	---	---	---	1370	1400	2370	2300	---	2340
25	2980	1760	2060	---	---	---	1350	---	2520	2160	---	2470
26	2820	2000	2300	---	2000	---	1360	---	2540	2220	---	2550
27	2810	1980	2580	---	2100	---	1380	1300	2590	2480	1400	2600
28	2730	1690	2230	---	---	---	1390	---	2610	2420	---	2660
29	2710	1900	2130	---	---	---	1380	1200	2550	2540	1550	2660
30	2690	1980	2010	2550	---	2040	1360	---	2530	2620	1720	2700
31	2630	---	1960	---	---	2070	---	1300	---	2430	2110	---

09306222 PICEANCE CREEK AT WHITE RIVER, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	16.5	7.0	10.0	3.5	4.0	1.0	1.0	.5	1.0	1.0	---	---
2	16.5	8.0	11.5	4.5	1.0	.5	1.0	1.0	1.0	1.0	---	---
3	14.5	5.0	11.5	5.5	.5	.5	1.0	1.0	1.0	1.0	---	---
4	14.0	4.5	9.5	3.5	.5	.5	1.0	.5	1.0	1.0	---	---
5	14.0	4.5	9.5	4.5	.5	.5	1.0	.5	1.0	1.0	---	---
6	14.0	4.0	7.5	2.0	.5	.5	1.0	1.0	1.0	1.0	---	---
7	14.5	4.5	8.0	1.0	.5	.5	1.0	.5	1.0	1.0	---	---
8	13.5	5.5	8.5	2.0	.5	.5	1.0	.5	1.5	1.0	---	---
9	15.0	6.0	8.5	2.0	.5	.5	---	---	1.5	1.0	---	---
10	15.0	6.0	6.0	2.0	.5	.5	---	---	1.5	1.0	---	---
11	15.0	6.5	3.5	.5	.5	.5	---	---	1.5	1.0	---	---
12	15.0	7.0	6.0	2.0	1.0	.5	---	---	1.5	1.0	---	---
13	13.0	6.5	4.0	.5	1.0	.5	---	---	1.5	1.0	---	---
14	12.0	4.0	4.5	1.5	1.0	.5	---	---	1.0	1.0	8.0	2.5
15	13.0	4.5	4.0	2.5	1.0	.5	---	---	1.0	1.0	8.5	2.5
16	11.0	4.5	4.0	2.0	1.0	.5	---	---	1.5	1.0	7.5	4.0
17	10.0	5.0	4.5	1.5	1.0	.5	---	---	1.5	1.0	9.5	5.0
18	15.0	8.0	4.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	8.5	5.0
19	13.5	6.0	4.0	1.0	1.0	1.0	1.0	.5	1.0	1.0	10.0	5.0
20	10.0	6.0	4.0	.5	1.0	.5	1.0	.5	1.5	1.0	9.0	5.5
21	10.5	9.0	3.0	.5	1.0	1.0	1.0	1.0	---	---	9.0	3.5
22	9.5	7.0	4.5	.5	1.0	1.0	1.0	1.0	---	---	8.0	3.0
23	10.0	3.5	3.0	.5	1.0	1.0	1.0	1.0	---	---	9.5	2.5
24	9.5	4.5	1.0	.5	1.0	1.0	1.0	1.0	---	---	12.5	3.5
25	10.0	6.0	3.0	.5	1.0	1.0	1.0	1.0	---	---	11.5	4.5
26	9.5	2.0	4.0	.5	1.0	1.0	1.0	1.0	---	---	12.0	5.0
27	10.0	2.0	4.0	.5	1.0	1.0	1.0	1.0	---	---	9.0	5.5
28	10.0	2.5	.5	.5	1.0	1.0	1.0	1.0	---	---	7.5	4.0
29	10.0	3.0	.5	.5	1.0	1.0	1.0	1.0	---	---	7.0	6.0
30	7.5	4.0	2.5	.5	1.0	.5	1.0	1.0	---	---	8.0	4.5
31	9.0	2.5	---	---	1.0	1.0	1.0	1.0	---	---	9.0	4.5

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	9.5	3.0	14.5	9.0	---	---	22.0	14.0	28.5	13.5	22.0	10.5
2	8.0	3.0	12.5	8.0	---	---	22.0	14.0	25.0	12.0	22.0	11.0
3	10.5	2.0	9.5	6.5	---	---	20.5	12.5	24.5	11.5	22.0	11.5
4	8.0	3.0	16.5	4.0	---	---	21.5	11.5	25.5	11.5	22.0	11.0
5	11.5	1.0	16.5	8.5	---	---	23.0	10.5	25.0	13.0	22.5	10.0
6	16.5	4.0	12.0	8.0	---	---	22.5	12.0	25.5	15.0	23.0	10.5
7	14.0	5.0	8.0	6.0	---	---	28.5	9.5	25.0	15.5	22.5	10.5
8	17.5	4.5	7.5	4.0	---	---	25.0	11.0	21.5	16.5	21.0	12.0
9	14.0	5.5	10.0	4.5	---	---	28.0	8.5	27.0	15.5	21.0	12.0
10	9.0	1.0	12.5	6.0	---	---	28.0	10.0	26.5	17.0	20.0	13.5
11	6.5	1.0	14.0	6.5	---	---	29.5	9.5	25.5	15.0	22.0	12.0
12	10.5	.5	17.5	8.5	---	---	29.5	10.5	22.5	15.5	21.0	10.0
13	10.5	1.0	19.5	10.0	---	---	29.0	12.0	24.0	17.0	16.5	8.0
14	16.5	4.0	19.0	7.5	---	---	29.0	11.0	19.5	15.5	19.0	8.0
15	18.5	6.5	18.0	11.5	---	---	27.0	13.5	19.0	13.5	19.5	6.0
16	18.0	11.0	18.0	10.5	---	---	23.0	13.5	17.5	15.0	20.5	6.5
17	17.5	7.5	19.0	12.5	---	---	28.0	13.0	19.0	13.0	20.5	6.5
18	16.5	8.0	21.0	12.5	---	---	28.5	13.5	18.0	13.0	21.0	8.0
19	13.5	8.0	20.0	13.0	---	---	29.0	11.0	17.5	13.5	18.5	8.5
20	15.5	5.5	21.5	14.5	---	---	26.0	11.5	17.5	13.5	20.0	14.0
21	15.0	7.0	22.0	7.5	25.5	10.0	22.0	12.5	---	---	20.5	9.5
22	15.5	7.0	---	---	26.5	11.5	22.0	14.0	---	---	20.0	9.5
23	16.0	7.5	---	---	28.0	14.0	26.5	13.0	23.0	13.0	20.5	9.0
24	15.0	9.0	---	---	24.0	14.0	28.5	13.0	23.5	15.5	20.5	9.5
25	16.0	8.0	---	---	25.5	15.0	28.5	13.0	22.0	14.5	19.0	10.0
26	16.0	6.0	---	---	23.0	13.5	25.5	13.5	22.0	14.0	18.0	11.0
27	17.5	6.0	---	---	22.5	13.5	23.0	12.5	21.0	13.5	21.0	9.5
28	17.5	8.5	---	---	25.0	13.0	26.5	13.5	---	---	19.5	8.0
29	17.5	6.5	---	---	23.0	13.0	26.0	11.0	22.5	11.5	19.5	8.0
30	17.0	7.5	---	---	22.0	14.0	27.0	10.0	17.5	11.5	19.0	7.0
31	---	---	---	---	---	---	26.5	10.0	21.0	11.0	---	---

09306222 PICEANCE CREEK AT WHITE RIVER, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	7.7	60	1.2	18	165	8.0	23	---	20
2	7.7	68	1.4	18	139	6.8	22	---	20
3	7.7	63	1.3	18	120	5.8	22	120	7.1
4	7.7	51	1.1	18	124	6.0	22	---	20
5	7.7	50	1.0	18	128	6.2	22	---	20
6	7.4	50	1.0	19	149	7.6	23	---	20
7	7.4	55	1.1	19	209	11	24	---	25
8	8.0	57	1.2	22	273	16	24	---	25
9	8.2	48	1.1	24	502	32	25	---	30
10	8.4	47	1.1	24	531	34	25	---	30
11	8.4	41	.93	24	513	34	26	450	32
12	8.4	37	.84	30	1050	85	27	516	38
13	8.7	36	.85	33	998	89	27	766	56
14	8.7	36	.85	31	525	44	27	770	56
15	9.3	33	.83	30	378	31	27	748	55
16	9.3	32	.80	28	425	32	27	538	39
17	9.0	38	.92	28	452	34	27	543	40
18	8.0	40	.86	28	331	25	27	458	33
19	8.7	38	.89	28	294	22	27	415	29
20	9.0	41	1.0	28	320	24	26	359	25
21	10	37	1.0	28	300	23	26	293	21
22	11	36	1.1	28	340	26	26	241	17
23	11	48	1.4	26	400	28	26	239	17
24	12	64	2.1	26	453	32	26	303	21
25	15	133	5.4	26	480	34	26	233	16
26	15	280	11	25	---	30	25	191	13
27	17	318	15	25	---	30	25	202	14
28	18	396	19	24	---	20	25	250	17
29	18	247	12	24	---	20	25	223	15
30	18	236	11	23	305	19	24	232	15
31	18	206	10	---	---	---	24	---	---
TOTAL	328.4	---	109.27	741	---	815.4	778	---	786.1

09306222 PICEANCE CREEK AT WHITE RIVER, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JANUARY			FEBRUARY			MARCH	
1	24	---	25	23	---	20	25	---	30
2	24	---	25	23	---	20	26	2250	158
3	24	229	15	23	---	20	26	1870	131
4	23	177	11	23	---	20	26	1580	111
5	23	---	20	23	---	20	26	1310	92
6	23	---	20	23	---	20	27	1220	89
7	23	---	20	23	407	25	28	1610	121
8	23	---	20	24	---	25	30	2120	172
9	23	---	20	24	---	25	31	1910	160
10	23	---	20	24	---	25	31	1570	132
11	22	---	20	24	---	25	31	1260	106
12	22	---	20	24	---	25	34	---	90
13	22	---	20	24	---	25	37	---	130
14	22	---	20	24	---	25	40	1580	171
15	22	---	20	24	---	25	42	1830	207
16	21	---	15	24	---	25	45	1800	219
17	21	---	15	25	443	30	49	2560	339
18	21	272	15	25	---	30	43	1430	166
19	21	---	15	25	---	30	42	1180	133
20	21	---	15	25	---	30	42	1040	118
21	21	---	15	25	---	30	43	1260	147
22	21	---	15	25	---	30	44	1280	152
23	22	292	17	24	---	25	43	1070	124
24	22	---	20	26	864	61	43	1020	118
25	22	---	20	25	---	30	43	1200	139
26	22	---	20	25	---	30	43	1130	131
27	22	---	20	25	767	51	43	920	107
28	22	---	20	25	---	30	46	1680	208
29	22	---	20	---	---	---	47	1510	191
30	22	---	20	---	---	---	46	1400	174
31	22	360	21	---	---	---	47	1540	196
TOTAL	688	---	579	677	---	777	1169	---	4562

09306222 PICEANCE CREEK AT WHITE RIVER, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	46	1500	186	71	1890	362	130	2530	888
2	46	1120	139	69	1640	306	121	2300	751
3	44	935	111	77	2150	447	111	1880	563
4	43	902	105	80	2320	501	109	1680	494
5	45	891	108	73	2330	459	100	1480	400
6	44	1140	135	72	1790	348	92	1220	303
7	44	1070	127	74	2150	430	85	1040	239
8	45	893	108	100	2530	683	79	888	189
9	51	1250	172	108	3800	1110	86	1210	281
10	59	2210	352	110	4150	1230	79	1040	222
11	66	2260	403	106	3410	976	69	832	155
12	57	1870	288	115	2930	910	58	675	106
13	56	2260	342	120	2730	885	51	554	76
14	59	1860	296	134	4250	1540	45	554	67
15	60	1920	311	134	4060	1470	42	598	68
16	65	2510	441	139	---	1500	42	683	77
17	70	2900	548	141	3740	1310	37	429	43
18	76	3710	761	148	3290	1310	31	388	32
19	79	3780	806	145	---	1300	25	400	27
20	76	3680	755	150	---	1300	22	244	14
21	71	2800	537	150	3190	1290	17	228	10
22	70	2310	437	167	---	2000	15	228	9.2
23	69	2210	412	147	4110	1630	15	167	6.8
24	69	2210	412	147	3960	1570	15	178	7.2
25	71	2370	454	150	---	1400	14	88	3.3
26	70	2170	410	146	---	1200	14	---	3.5
27	69	2000	373	135	2460	897	13	---	3.0
28	69	2000	373	143	---	1000	11	53	1.6
29	70	2000	378	145	3220	1260	12	65	2.1
30	72	2090	406	150	---	1500	11	---	1.5
31	---	---	---	142	---	1200	---	---	---
TOTAL	1831	---	10686	3788	---	33324	1551	---	5043.2

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JULY			AUGUST			SEPTEMBER	
1	11	228	6.8	40	683	74	41	363	40
2	10	---	1.0	47	625	79	41	288	32
3	9.7	---	1.0	49	688	91	38	276	28
4	9.4	---	1.0	47	---	85	34	248	23
5	9.3	---	1.0	48	633	82	31	244	20
6	9.6	44	1.1	50	805	109	30	205	17
7	8.9	---	.50	50	---	105	30	266	22
8	8.3	---	.50	51	---	110	30	189	15
9	8.8	---	.50	50	763	103	29	183	14
10	8.8	---	.50	48	702	91	25	160	11
11	9.3	32	.80	46	784	97	24	165	11
12	9.9	48	1.6	44	833	99	23	---	6.5
13	10	---	1.0	46	744	92	23	---	4.0
14	11	---	1.5	45	720	87	21	44	2.5
15	11	60	1.8	46	627	78	20	39	2.1
16	12	77	2.5	46	612	76	21	28	1.6
17	13	95	3.3	46	663	82	19	37	1.9
18	13	106	3.7	46	714	89	17	55	2.5
19	13	66	2.3	46	765	95	16	39	1.7
20	10	62	1.7	47	697	88	15	44	1.8
21	10	71	1.9	45	612	74	14	59	2.2
22	13	35	1.2	41	---	70	14	58	2.2
23	31	1530	457	40	640	69	13	55	1.9
24	25	495	33	40	576	62	13	68	2.4
25	24	363	24	38	597	61	11	50	1.5
26	22	308	18	40	518	56	10	62	1.7
27	27	399	29	42	495	56	10	49	1.3
28	37	431	43	41	428	47	9.0	60	1.5
29	32	294	25	43	420	49	8.5	21	.48
30	31	278	23	44	398	47	8.0	10	.22
31	34	---	65	43	397	46	---	---	---
TOTAL	492.0	---	754.20	1395	---	2449	638.5	---	273.00
YEAR	14076.9		60158.17						

09306235 CORRAL GULCH BELOW WATER GULCH, NEAR RANGELY, CO

LOCATION.--Lat 39°54'22", long 108°31'56", in SE¼NW¼ sec.5, T.2 S., R.99 W., Rio Blanco County, Hydrologic Unit 14050006, on left bank 0.1 mi (0.2 km) downstream from Water Gulch and 19 mi (31 km) southeast of Rangely.

DRAINAGE AREA.--8.61 mi² (22.30 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1974 to current year.

GAGE.--Water-stage recorder. Concrete control since Aug. 1, 1974. Prior to Aug. 1, 1974, water-stage recorder at different datum. Altitude of gage is 6,975 ft (2,125 m), from topographic map.

REMARKS.--Records good. No diversion above gage.

AVERAGE DISCHARGE.--5 years, 0.16 ft³/s (0.005 m³/s), 116 acre-ft/yr (0.14 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 272 ft³/s (7.70 m³/s) July 23, 1977, gage height, 3.20 ft (0.975 m); no flow many days most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5.9 ft³/s (0.167 m³/s) at 1600 May 27, gage height, 1.81 ft (0.552 m); no flow Mar. 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.30	.16	.24	.10	.06	.10	.14	.50	.88	.53	.22	.41
2	.30	.16	.22	.10	.06	.10	.10	.38	.88	.53	.24	.44
3	.28	.20	.20	.10	.07	.07	.11	.50	.84	.56	.28	.41
4	.12	.18	.25	.10	.07	.10	.14	.50	.84	.56	.30	.44
5	.14	.16	.26	.10	.07	.07	.12	.52	.84	.53	.30	.44
6	.14	.14	.26	.08	.07	.07	.12	.52	.84	.53	.30	.44
7	.14	.14	.25	.08	.07	.08	.10	.53	.84	.53	.30	.44
8	.24	.14	.23	.08	.07	.12	.12	.80	.88	.53	.30	.44
9	.26	.14	.22	.08	.07	.07	.16	.76	.80	.50	.30	.44
10	.24	.14	.20	.08	.08	.10	.20	.72	.76	.50	.32	.47
11	.24	.14	.19	.06	.10	.06	.13	.72	.72	.50	.32	.50
12	.20	.16	.18	.06	.08	.10	.18	.72	.68	.50	.32	.50
13	.20	.16	.16	.06	.10	.07	.22	.76	.64	.47	.32	.47
14	.24	.19	.15	.06	.12	.06	.20	.80	.58	.47	.32	.38
15	.20	.28	.14	.06	.12	.06	.20	.80	.64	.50	.35	.32
16	.24	.28	.14	.06	.14	.06	.16	.96	.64	.47	.49	.47
17	.16	.28	.13	.06	.12	.07	.12	1.1	.68	.44	.47	.44
18	.09	.27	.13	.06	.16	.06	.12	1.0	.68	.41	.44	.44
19	.10	.26	.12	.07	.08	.07	.14	.88	.68	.41	.41	.41
20	.12	.26	.12	.07	.08	.07	.14	.84	.64	.41	.41	.41
21	.14	.24	.11	.07	.08	.08	.18	.80	.60	.44	.44	.41
22	.16	.22	.11	.06	.07	.04	.18	1.3	.53	.45	.41	.41
23	.18	.28	.10	.06	.08	.05	.16	1.3	.53	.44	.41	.41
24	.20	.35	.10	.05	.08	.05	.14	1.2	.53	.41	.41	.38
25	.24	.24	.10	.05	.10	.05	.08	1.3	.50	.35	.41	.41
26	.20	.26	.10	.06	.10	.08	.14	1.3	.50	.14	.41	.41
27	.22	.26	.10	.06	.10	.08	.30	1.4	.50	.30	.44	.38
28	.18	.28	.10	.06	.10	.12	.38	1.2	.50	.30	.44	.38
29	.18	.28	.10	.06	---	.15	.41	1.1	.50	.32	.44	.38
30	.18	.28	.10	.06	---	.07	.41	1.1	.53	.30	.44	.32
31	.16	---	.10	.06	---	.10	---	.96	---	.22	.44	---
TOTAL	5.99	6.53	4.91	2.17	2.50	2.43	5.30	27.27	20.30	13.55	11.40	12.60
MEAN	.19	.22	.16	.070	.089	.078	.18	.88	.68	.44	.37	.42
MAX	.30	.35	.26	.10	.16	.15	.41	1.4	.88	.56	.49	.50
MIN	.09	.14	.10	.05	.06	.04	.08	.38	.50	.14	.22	.32
AC-FT	12	13	9.7	4.3	5.0	4.8	11	54	40	27	23	25

CAL YR 1978 TOTAL 72.16 MEAN .20 MAX .60 MIN .00 AC-FT 143
WTR YR 1979 TOTAL 114.95 MEAN .31 MAX 1.4 MIN .04 AC-FT 228

09306235 CORRAL GULCH BELOW WATER GULCH, NEAR RANGELY, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--March 1974 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1974 to current year.
WATER TEMPERATURE: April 1974 to current year.
SUSPENDED-SEDIMENT DISCHARGE: October 1974 to current year.

INSTRUMENTATION.--Water-quality monitor since April 1974. Pumping sediment sampler since October 1974.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 1,880 micromhos Oct. 25, 1978; minimum, 230 micromhos Mar. 20, 1978.
WATER TEMPERATURES: Maximum, 31.0°C July 13, 1978; minimum, freezing point many days during winter months each year.
SEDIMENT CONCENTRATIONS: Maximum daily, 16,000 mg/L, estimated Apr. 1, 1976; no flow many days during 1974-78.
SEDIMENT LOADS: Maximum daily, 162 tons (147 t) May 20, 1979; no flow many days during 1974-78.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 1,880 micromhos Oct. 25; minimum, 635 micromhos May 3.
WATER TEMPERATURES: Maximum, 27.5°C Aug. 4; minimum, 0.0°C on several days during November to January, Apr. 2-4.
SEDIMENT CONCENTRATIONS: Maximum daily, 6,770 mg/L, Mar. 2, minimum daily, 16 mg/L June 29.
SEDIMENT LOADS: Maximum daily, 162 tons (147 t) May 20; minimum daily, 0.03 ton (0.03 t) July 2.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM ADSORPTION RATIO
OCT 24...	0830	.30	1700	8.2	2.5	10.6	470	--	97	55	150	3.0
NOV 21...	1030	.24	1100	8.0	1.5	10.8	460	--	87	58	82	1.7
DEC 04...	0940	E.25	1100	8.3	2.0	10.2	470	--	91	59	83	1.7
JAN 24...	1000	E.05	1100	8.3	.5	12.6	490	--	93	62	83	1.6
FEB 22...	1300	.08	1120	8.3	1.0	11.2	460	--	92	57	83	1.7
APR 03...	1130	E.11	900	8.1	1.0	10.8	360	360	68	46	67	1.5
24...	0845	.14	1080	7.8	9.0	10.6	440	120	75	60	85	1.8
MAY 08...	1035	.72	1000	8.4	9.0	10.7	460	--	86	60	77	1.6
JUN 25...	1100	.53	1080	8.3	21.0	7.5	400	--	70	55	75	1.6
JUL 16...	1000	.50	1120	8.2	17.0	8.1	460	130	75	65	75	1.5
AUG 21...	1015	.44	1130	8.1	14.5	8.1	400	74	58	63	81	1.8
SEP 18...	1010	.44	1100	7.8	11.5	8.3	450	120	87	56	83	1.7

E ESTIMATED.

09306235 CORRAL GULCH BELOW WATER GULCH, NEAR RANGELY, CO--Continued

WATER-QUALITY RECORDS, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER DAY)	BORON, DISSOLVED (UG/L AS B)	CARBON, ORGANIC DISSOLVED (MG/L AS C)
OCT 24...	56	--	--	--	310	150	.3	22	--	--	--	--
NOV 21...	1.1	--	--	--	300	7.6	.2	24	--	--	--	--
DEC 04...	1.5	--	--	--	280	7.8	.3	22	--	--	--	--
JAN 24...	1.2	--	--	--	280	7.4	.2	22	--	--	--	--
FEB 22...	.9	--	--	--	260	6.7	.2	19	--	--	--	--
APR 03...	.8	--	--	--	230	5.8	.2	16	--	--	--	--
24...	1.1	390	0	320	280	7.9	2.1	22	732	.28	100	7.6
MAY 08...	1.4	--	--	--	260	6.2	.3	22	--	--	--	--
JUN 25...	1.2	--	--	--	280	6.8	.3	21	--	--	--	--
JUL 16...	1.6	--	--	330	270	7.3	.3	21	714	.96	30	7.0
AUG 21...	1.2	--	--	330	310	7.0	.3	--	724	.86	100	6.5
SEP 18...	1.3	--	--	330	300	6.7	.3	21	760	.90	100	9.6

DATE	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (NTU)	NITROGEN, DISSOLVED (MG/L AS N)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	SULFIDE TOTAL (MG/L AS S)	BROMIDE DISSOLVED (MG/L AS BR)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)
APR 24...	0	1.0	1.3	19	1.1	K80	K8	.5	.1	1.0
SEP 18...	5	7.0	1.5	25	.7	--	4000	.0	.1	.90

DATE	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, DISSOLVED (UG/L AS BA)	BERYLLIUM, DISSOLVED (UG/L AS BE)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)
APR 24...	.01	.30	.01	.00	0	4	60	<1	<1	0
SEP 18...	.01	.54	.03	.00	10	5	70	<1	<1	10

K BASED ON NON-IDEAL COLONY COUNT.

09306235 CORRAL GULCH BELOW WATER GULCH, NEAR RANGELY, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)	LITHIUM DISSOLVED (UG/L AS LI)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, DISSOLVED (UG/L AS SE)	STRONTIUM, DISSOLVED (UG/L AS SR)
APR 24...	0	10	0	20	1	.0	39	0	3	2000
SEP 18...	2	<10	0	20	2	.0	28	1	3	1900

DATE	VANADIUM, DISSOLVED (UG/L AS V)	ZINC, DISSOLVED (UG/L AS ZN)	GROSS ALPHA, DISSOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DISSOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DISSOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	RADIUM 226, DISSOLVED, RADON METHOD (PCI/L)	URANIUM DISSOLVED, EXTRACTION (UG/L)
APR 24...	3.3	<3	<14	.8	<5.0	.8	<4.4	.8	.10	6.3
SEP 18...	5.0	<3	--	--	--	--	--	--	--	--

DATE	TIME	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)	PCB, TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLORDANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)
APR 24...	0845	.00	9	.00	.0	.00	.0	.00	.00
SEP 18...	1010	.00	1	.10	.0	.00	.0	.00	.00

DATE	DDT, TOTAL (UG/L)	DIAZINON, TOTAL (UG/L)	DIELDRIN TOTAL (UG/L)	ENDOSULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	ETHION, TOTAL (UG/L)	HEPTACHLOR, TOTAL (UG/L)	HEPTACHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)
APR 24...	.00	.00	.00	.00	.00	.00	.00	.00	.00
SEP 18...	.00	.00	.00	.00	.00	.00	.00	.00	.00

DATE	METHYL PARATHION, TOTAL (UG/L)	METHYL TRITHION, TOTAL (UG/L)	PARATHION, TOTAL (UG/L)	TOXAPHENE, TOTAL (UG/L)	TOTAL TRITHION (UG/L)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	SILVEX, TOTAL (UG/L)
APR 24...	.00	.00	.00	0	.00	.00	.00	.00
SEP 18...	.00	.00	.00	0	.00	.00	.00	.00

09306235 CORRAL GULCH BELOW WATER GULCH, NEAR RANGELY, CO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	1100	1090	---	1110	---	---	900	---	1120	950	1070
2	---	1100	1100	---	1100	---	984	906	---	1100	970	1060
3	---	1110	1140	---	1090	---	1000	831	---	1120	1040	1100
4	---	1120	1130	---	1090	1090	972	---	---	1100	1060	1150
5	---	1110	1050	---	1100	1080	990	---	---	1100	1080	1130
6	1080	1130	1060	1060	1140	1050	1000	---	---	1090	1090	1110
7	1060	1130	1050	1100	1120	1100	990	---	---	1100	1110	1100
8	1060	1130	1000	---	1070	---	980	---	---	1120	1140	1070
9	1060	1120	1080	---	1080	1080	1000	---	---	1130	1140	1060
10	1060	1090	1070	1050	1090	1040	---	---	---	1120	1010	1090
11	1080	1070	1080	1080	1100	---	---	---	---	1110	1010	1080
12	1070	---	1060	1090	1110	1030	---	---	---	1100	1050	1070
13	1060	---	1090	1100	1110	---	---	---	1070	1090	1090	1080
14	1060	1070	1070	1110	1110	---	---	---	1090	1090	1140	1070
15	1040	1040	1060	1110	1130	---	---	---	1100	1080	1090	1070
16	1010	1020	1060	1120	1160	992	---	---	1100	1120	1160	1100
17	1030	1000	1040	1120	1180	993	1030	---	1110	1120	1020	1060
18	1020	---	1080	1130	1160	1010	1030	---	1170	1120	1020	1090
19	1010	---	1230	1120	1100	991	1020	---	---	1110	1080	1060
20	990	---	1180	1090	1150	979	1030	---	1090	1100	1080	1060
21	1020	1110	1100	1120	1160	975	1040	---	1100	1100	1090	1060
22	1020	1100	1090	1130	1140	990	1050	930	1110	1100	1090	1060
23	990	1080	1080	---	1160	1020	1050	940	1100	1100	1100	1100
24	1020	---	1080	---	1150	---	1020	---	1070	1100	1080	1070
25	1510	1090	1080	1110	1130	---	998	---	1070	1100	1050	1100
26	1260	1090	1060	1120	1120	---	1010	---	1100	1090	1020	1100
27	---	1090	---	1140	1120	---	991	---	1110	1080	1030	1090
28	---	1080	---	1130	---	---	925	---	1110	1090	1070	1040
29	1030	1120	---	1130	---	---	921	---	1090	1130	1090	1080
30	1040	1100	---	1140	---	---	930	---	1090	1100	1100	1090
31	1080	---	---	1140	---	---	---	950	---	1100	1070	---

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMAFR 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	18.0	2.5	13.0	2.0	4.0	1.0	---	---	2.0	1.5	---	---
2	18.0	1.0	13.0	3.0	1.0	1.0	---	---	2.0	1.5	---	---
3	16.5	2.0	13.0	2.5	1.0	1.0	---	---	1.5	1.0	---	---
4	---	---	11.0	1.0	4.0	1.0	---	---	2.5	1.0	---	---
5	---	---	11.0	1.0	2.5	1.0	2.5	1.0	2.0	.5	---	---
6	19.5	4.0	7.5	.5	1.5	1.0	2.5	2.0	2.5	1.5	---	---
7	19.0	2.5	8.0	.5	1.0	1.0	2.0	.5	2.0	1.5	---	---
8	16.0	4.0	8.5	.5	1.0	1.0	2.0	.5	2.5	1.0	---	---
9	19.0	4.0	8.5	1.0	2.5	1.0	2.5	1.0	2.5	1.0	---	---
10	18.5	4.0	4.5	1.0	3.0	1.0	3.0	2.0	3.0	1.0	---	---
11	18.5	4.0	1.0	1.0	2.5	1.0	3.0	2.0	3.0	1.5	---	---
12	18.0	4.5	6.5	1.5	2.5	1.0	3.0	2.5	3.5	2.0	---	---
13	17.0	2.0	5.0	1.5	2.0	1.0	2.0	.5	3.0	2.0	---	---
14	16.5	2.5	5.0	2.0	2.5	1.0	2.5	1.0	3.0	1.5	---	---
15	17.0	2.5	5.0	1.0	2.5	1.0	2.5	1.0	3.0	1.0	9.0	1.0
16	16.0	2.0	6.0	1.0	2.0	1.0	2.5	1.5	2.5	1.0	8.0	1.0
17	15.0	3.5	3.0	1.0	3.0	1.0	3.0	1.5	2.5	1.0	9.0	1.0
18	15.0	6.0	2.5	.0	3.0	2.5	3.0	2.0	2.5	.5	8.5	1.0
19	16.0	3.0	3.5	.5	2.5	2.0	3.5	1.5	3.5	.5	9.5	1.0
20	15.5	3.5	4.0	1.0	2.0	.5	2.0	.5	3.5	1.5	9.0	1.0
21	13.0	6.5	5.0	1.0	2.0	1.0	2.5	.0	3.5	1.0	7.5	1.0
22	9.0	6.5	4.5	1.0	2.5	1.0	1.5	1.0	2.0	.5	8.0	1.0
23	7.5	1.5	3.0	1.0	1.5	1.0	1.0	.5	2.5	.5	9.5	.5
24	12.5	2.5	3.5	.5	3.0	1.0	2.0	.5	3.0	1.0	12.5	.5
25	12.5	2.5	4.5	1.5	2.5	1.0	3.0	2.0	3.0	.5	7.0	1.0
26	9.0	.5	4.5	2.0	1.0	.0	2.0	1.5	3.5	1.0	10.0	1.0
27	9.5	.5	3.0	1.0	---	---	2.5	1.0	2.5	1.5	9.0	1.0
28	12.0	1.0	4.0	1.0	---	---	2.0	1.0	---	---	12.0	1.0
29	12.0	1.0	4.0	2.0	---	---	2.0	1.0	---	---	1.5	1.0
30	11.5	1.0	3.5	2.0	---	---	1.0	.5	---	---	---	---
31	9.5	1.5	---	---	---	---	2.0	.5	---	---	---	---

09306235 CORRAL GULCH BELOW WATER GULCH, NEAR RANGELY, CO--Continued

WATER-QUALITY RECORDS, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	10.5	7.0	20.0	4.0	25.5	5.5	26.5	8.5	23.5	6.0
2	9.5	.0	8.5	6.0	21.0	5.0	23.0	8.5	25.5	7.5	23.5	6.5
3	11.0	.0	9.5	3.5	21.0	6.0	23.5	7.5	25.5	7.0	23.5	7.0
4	10.0	.0	23.0	1.5	22.5	7.0	22.0	7.0	27.5	7.0	23.0	6.5
5	20.5	1.0	19.5	4.5	22.5	7.0	22.5	7.0	27.0	8.0	23.5	6.0
6	21.5	1.0	17.0	2.5	21.0	7.5	19.0	8.0	26.0	9.5	24.0	6.5
7	19.0	.5	9.0	2.0	21.0	7.5	25.0	7.0	24.5	9.0	22.5	6.5
8	23.0	.5	8.0	2.5	---	---	23.0	8.0	24.0	9.5	22.0	7.5
9	19.5	.5	---	---	---	---	25.0	7.5	24.5	9.0	22.5	7.5
10	---	---	---	---	---	---	24.0	8.0	24.5	8.5	20.5	8.5
11	---	---	---	---	---	---	24.5	7.5	25.0	7.5	23.0	6.5
12	---	---	---	---	---	---	26.0	7.5	22.5	8.5	21.0	4.5
13	---	---	---	---	23.5	7.5	24.5	7.5	23.0	9.0	18.5	4.5
14	---	---	---	---	21.5	7.5	26.0	7.5	15.5	8.5	19.5	4.0
15	---	---	---	---	22.5	7.0	23.5	8.5	16.0	8.0	20.5	3.5
16	---	---	---	---	22.0	6.0	25.5	9.0	15.0	8.5	22.0	4.0
17	23.0	2.5	---	---	22.0	6.0	27.0	8.5	18.5	7.0	21.0	4.5
18	20.5	2.0	---	---	17.5	7.0	23.5	8.5	19.5	8.5	21.0	5.0
19	15.0	2.0	---	---	---	---	25.5	8.0	17.0	9.0	21.0	5.5
20	20.5	1.5	---	---	22.0	6.0	24.0	8.0	17.0	8.5	18.5	6.5
21	20.0	1.5	---	---	23.0	6.5	24.5	7.5	24.0	7.0	21.0	5.5
22	20.0	2.0	22.0	6.5	23.5	6.0	20.0	8.0	22.0	7.0	20.0	6.0
23	20.0	2.5	22.5	6.0	23.5	6.5	25.0	8.5	24.0	7.0	21.0	6.0
24	20.5	5.0	---	---	23.5	7.5	24.5	8.5	24.5	7.5	21.0	6.5
25	20.0	3.0	---	---	24.5	7.0	25.5	8.0	23.0	7.5	18.0	6.5
26	22.5	1.0	---	---	23.5	6.5	23.5	8.0	22.0	6.5	19.5	7.0
27	20.0	2.0	---	---	24.5	8.0	23.0	8.0	24.0	6.5	20.5	5.5
28	16.5	4.5	---	---	27.0	8.0	25.5	8.5	23.5	7.5	19.5	5.0
29	16.5	3.0	---	---	27.0	6.5	25.0	8.0	23.5	6.0	20.0	5.0
30	17.0	4.0	---	---	24.5	10.0	25.0	7.5	19.5	7.0	20.0	5.0
31	---	---	16.5	4.5	---	---	26.0	7.5	22.5	7.0	---	---

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM
MAY							
07...	1200	.65	6290	11	12	18	36
18...	1520	1.0	8660	23	11	21	41
21...	1230	.90	3740	9.1	14	25	48

DATE	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 2.00 MM
MAY						
07...	58	64	68	71	73	82
18...	58	63	66	69	71	78
21...	68	72	75	79	81	89

09306235 CORRAL GULCH BELOW WATER GULCH, NEAR RANGELY, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	.30	---	.05	.16	---	.04	.24	---	.20
2	.30	---	.05	.16	---	.04	.22	---	.18
3	.28	---	.05	.20	---	.06	.20	---	.16
4	.12	---	.02	.18	---	.07	.25	214	.14
5	.14	---	.03	.16	---	.07	.26	---	.13
6	.14	88	.03	.14	---	.07	.26	---	.12
7	.14	---	.03	.14	204	.07	.25	---	.11
8	.24	---	.05	.14	---	.07	.23	---	.10
9	.26	---	.05	.14	---	.07	.22	---	.09
10	.24	83	.05	.14	---	.07	.20	---	.08
11	.24	---	.05	.14	---	.07	.19	---	.07
12	.20	---	.04	.16	---	.10	.18	---	.06
13	.20	---	.04	.16	---	.10	.16	116	.05
14	.24	---	.05	.19	342	.17	.15	---	.05
15	.20	---	.04	.28	---	.16	.14	---	.05
16	.24	---	.04	.28	---	.16	.14	---	.05
17	.16	---	.03	.28	---	.20	.13	---	.05
18	.09	---	.01	.27	---	.20	.13	---	.05
19	.10	---	.02	.26	---	.20	.12	---	.05
20	.12	---	.03	.26	---	.06	.12	---	.05
21	.14	---	.04	.24	96	.06	.11	159	.05
22	.16	---	.05	.22	---	.07	.11	---	.05
23	.18	---	.05	.28	---	.30	.10	---	.04
24	.20	---	.05	.35	---	.30	.10	---	.04
25	.24	---	.05	.24	---	.30	.10	---	.04
26	.20	---	.05	.26	---	.20	.10	---	.04
27	.22	---	.05	.26	---	.20	.10	---	.03
28	.18	---	.05	.28	264	.20	.10	---	.03
29	.18	---	.05	.28	---	.20	.10	---	.03
30	.18	90	.04	.28	---	.20	.10	---	.03
31	.16	---	.04	---	---	---	.10	---	.02
TOTAL	5.99	---	1.28	6.53	---	4.08	4.91	---	2.24

09306235 CORRAL GULCH BELOW WATER GULCH, NEAR RANGELY, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JANUARY			FEBRUARY			MARCH	
1	.10	---	.02	.06	60	.01	.10	---	.02
2	.10	---	.02	.06	---	.01	.10	---	.02
3	.10	---	.01	.07	---	.04	.07	---	.02
4	.10	42	.01	.07	---	.05	.10	---	.02
5	.10	---	.01	.07	---	.07	.07	---	.02
6	.08	---	.01	.07	---	.08	.07	---	.02
7	.08	---	.01	.07	525	.09	.08	2100	.45
8	.08	---	.01	.07	---	.10	.12	3300	1.1
9	.08	---	.01	.07	---	.10	.07	3520	.66
10	.08	---	.01	.08	---	.10	.10	4500	1.2
11	.06	---	.01	.10	---	.10	.06	---	.20
12	.06	---	.01	.08	---	.10	.10	2520	.68
13	.06	---	.01	.10	---	.20	.07	2020	.38
14	.06	---	.01	.12	---	.50	.06	657	.11
15	.06	---	.01	.12	---	1.0	.06	508	.09
16	.06	63	.01	.14	5500	2.1	.06	1360	.25
17	.06	---	.01	.12	---	1.0	.07	814	.15
18	.06	---	.01	.16	---	3.0	.06	895	.15
19	.07	---	.01	.08	---	.10	.07	773	.14
20	.07	---	.01	.08	---	.10	.07	440	.08
21	.07	---	.01	.08	---	.10	.08	570	.12
22	.06	---	.01	.07	151	.03	.04	2380	.38
23	.06	---	.01	.08	---	.03	.05	---	.10
24	.05	74	.01	.08	---	.03	.05	---	.10
25	.05	---	.01	.10	---	.02	.05	---	.10
26	.06	---	.01	.10	---	.02	.08	495	.10
27	.06	---	.01	.10	83	.02	.08	265	.06
28	.06	---	.01	.10	---	.02	.12	2700	.87
29	.06	---	.01	---	---	---	.15	2450	.99
30	.06	---	.01	---	---	---	.07	1820	.44
31	.06	---	.01	---	---	---	.10	1350	.47
TOTAL	2.17	---	0.33	2.50	---	9.12	2.43	---	9.49

09306235 CORRAL GULCH BELOW WATER GULCH, NEAR RANGELY, CO--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	.14	1150	.37	.50	7700	10	.88	1870	4.4
2	.10	517	.14	.38	---	6.0	.88	2160	5.1
3	.11	1010	.36	.50	9000	12	.84	1450	3.3
4	.14	---	.40	.50	9360	13	.84	1090	2.5
5	.12	---	.30	.52	---	10	.84	1040	2.4
6	.12	---	.20	.52	---	10	.84	---	2.9
7	.10	---	.20	.53	5280	7.5	.84	---	2.9
8	.12	---	.20	.80	5400	12	.88	---	4.0
9	.16	---	.20	.76	6800	14	.80	---	2.0
10	.20	350	.20	.72	6930	13	.76	---	1.2
11	.13	---	.08	.72	7360	14	.72	---	.70
12	.18	---	.08	.72	---	14	.68	124	.23
13	.22	---	.10	.76	---	15	.64	161	.28
14	.20	---	.06	.80	7800	17	.68	70	.13
15	.20	---	.06	.80	7800	17	.64	84	.15
16	.16	88	.04	.96	---	23	.64	109	.19
17	.12	75	.02	1.1	---	28	.68	105	.19
18	.12	98	.03	1.0	7320	22	.68	76	.14
19	.14	139	.05	.88	---	20	.68	30	.05
20	.14	163	.06	.84	---	18	.64	30	.05
21	.18	182	.09	.80	7200	15	.60	56	.09
22	.18	165	.08	1.3	---	38	.53	88	.12
23	.16	118	.05	1.3	8350	27	.53	84	.12
24	.14	126	.05	1.2	10800	32	.53	26	.04
25	.08	310	.07	1.3	---	49	.50	44	.06
26	.14	354	.13	1.3	---	46	.50	28	.04
27	.30	2720	2.2	1.4	---	46	.50	22	.03
28	.38	5580	5.7	1.2	---	36	.50	24	.03
29	.41	5890	6.5	1.1	---	30	.50	22	.03
30	.41	5200	5.8	1.1	7360	21	.53	18	.02
31	---	---	---	.96	5000	13	---	---	---
TOTAL	5.30	---	23.82	27.27	---	648.5	20.30	---	33.39

09306235 CORRAL GULCH BELOW WATER GULCH, NEAR RANGELY, CO--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JULY			AUGUST			SEPTEMBER	
1	.53	8	.01	.22	24	.01	.41	---	.04
2	.53	30	.04	.24	---	.01	.44	---	.05
3	.56	32	.05	.28	---	.02	.41	---	.06
4	.56	22	.03	.30	---	.02	.44	64	.07
5	.53	22	.03	.30	---	.02	.44	---	.07
6	.53	20	.03	.30	---	.02	.44	---	.07
7	.53	18	.02	.30	26	.02	.44	---	.07
8	.53	40	.06	.30	---	.02	.44	---	.07
9	.50	46	.06	.30	---	.02	.44	---	.07
10	.50	32	.04	.32	---	.01	.47	---	.08
11	.50	22	.03	.32	---	.01	.50	---	.08
12	.50	20	.02	.32	---	.01	.50	---	.08
13	.47	23	.03	.32	---	.01	.47	---	.08
14	.47	20	.02	.32	10	.01	.38	---	.07
15	.50	30	.04	.35	---	.02	.32	---	.06
16	.47	28	.04	.49	---	.64	.47	---	.08
17	.44	44	.05	.47	---	.05	.44	---	.08
18	.41	37	.04	.44	---	.04	.44	67	.08
19	.41	49	.05	.41	---	.04	.41	101	.11
20	.41	44	.05	.41	---	.04	.41	139	.15
21	.44	43	.05	.44	---	.04	.41	147	.16
22	.45	403	1.0	.41	---	.04	.41	403	.45
23	.44	10	.01	.41	---	.04	.41	361	.40
24	.41	---	.01	.41	---	.04	.38	---	.20
25	.35	---	.01	.41	---	.04	.41	---	.20
26	.14	---	.01	.41	---	.04	.41	134	.15
27	.30	---	.01	.44	30	.04	.38	189	.19
28	.30	---	.01	.44	---	.04	.38	202	.21
29	.32	---	.01	.44	---	.04	.38	202	.21
30	.30	---	.01	.44	---	.04	.32	122	.10
31	.22	---	.01	.44	---	.04	---	---	---
TOTAL	13.55	---	1.88	11.40	---	1.48	12.60	---	3.79
YEAR	114.95		739.40						

09306237 DRY FORK NEAR RANGELY, CO

LOCATION.--Lat 39°55'20", long 108°31'55", in SE¼NE¼ sec.32, T.1 S., R.99 W., Rio Blanco County, Hydrologic Unit 14050007, on left bank 1.7 mi (2.7 km) upstream from mouth and 18 mi (29 km) southeast of Rangely.

DRAINAGE AREA.--2.74 mi^2 (7.10 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1974 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 7,030 ft (2,141 m), from topographic map.

REMARKS.--Records good, except those for days of flow, which are poor.

AVERAGE DISCHARGE.--5 years, 0.005 ft^3/s (0.001 m^3/s), 3.6 acre-ft/yr (0.004 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 202 ft^3/s (5.72 m^3/s) July 23, 1977, gage height, 3.16 ft (0.963 m), from slope-area measurement of peak flow; no flow most of each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2.2 ft^3/s (0.062 m^3/s) at 1400 Aug. 15, gage height, 1.82 ft (0.555 m); only peak above base of 2.0 ft^3/s (0.057 m^3/s); no flow most of year.

REVISIONS.--The maximum discharge for water year 1978 has been revised to 2.2 ft^3/s (0.062 m^3/s), Oct. 6, gage height 1.82 ft (0.555 m). This figure supersedes that published in WDR-CO-78-3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

MAY 27 0.01

AUG. 16 0.08

CAL YR 1978	TOTAL 0.14	MEAN .000	MAX 0.14	MIN .00	AC-FT 0.3
WTR YR 1979	TOTAL 0.09	MEAN .000	MAX 0.08	MIN .00	AC-FT 0.2

09306237 DRY FORK NEAR RANGELY, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1974 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1974 to current year.
WATER TEMPERATURE: April 1974 to current year.
SUSPENDED-SEDIMENT DISCHARGE: October 1974 to current year.

INSTRUMENTATION.--Water-quality monitor since April 1974. Pumping sediment sampler since October 1974.

REMARKS.--Flow occurred only on days shown.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 1,030 micromhos Sept. 3, 1977; minimum, 243 micromhos May 16, 1979.
WATER TEMPERATURES: Maximum, 22.0°C July 23, 1977; minimum, 5.0°C Aug. 26, 1977.
SEDIMENT CONCENTRATIONS: Maximum daily, 6,580 mg/L Oct. 6, 1978; no flow many days during each year.
SEDIMENT LOADS: Maximum daily, 21 tons (19 t) Oct. 6, 1978; no flow many days during each year.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 500 micromhos Aug. 16; minimum, 243 micromhos May 16.
WATER TEMPERATURES: Maximum, 15.0°C Aug. 16; minimum, 7.0°C May 16.
SEDIMENT CONCENTRATIONS: Maximum daily, 4,480 mg/L Aug. 16; no flow many days during each year.
SEDIMENT LOADS: Maximum daily, 18 tons (16 t) Aug. 16; no flow many days during year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM ADSORPTION RATIO
AUG 16...	1430	E.08	556	7.8	200	87	51	17	29	.9

DATE	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	BORON, DISSOLVED (UG/L AS B)	POTASSIUM 40 TOTAL (PCI/L)
AUG 16...	4.6	110	120	9.1	.3	9.4	339	7.4	140	3.4

E ESTIMATED.

09306237 DRY FORK NEAR RANGELY, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								---			---	
2								---			---	
3								---			---	
4								---			---	
5								---			---	
6								---			---	
7								---			---	
8								---			---	
9								---			---	
10								---			---	
11								---			---	
12								---			---	
13								---			---	
14								---			---	
15								---			---	
16								---			410	
17								---			---	
18								---			---	
19								---			---	
20								---			---	
21								---			---	
22								---			---	
23								---			---	
24								---			---	
25								---			---	
26								---			---	
27								243			---	
28								---			---	
29								---			---	
30								---			---	
31								---			---	

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1			---	---					---	---		
2			---	---					---	---		
3			---	---					---	---		
4			---	---					---	---		
5			---	---					---	---		
6			---	---					---	---		
7			---	---					---	---		
8			---	---					---	---		
9			---	---					---	---		
10			---	---					---	---		
11			---	---					---	---		
12			---	---					---	---		
13			---	---					---	---		
14			---	---					---	---		
15			---	---					---	---		
16			---	---					15.0	14.0		
17			---	---					---	---		
18			---	---					---	---		
19			---	---					---	---		
20			---	---					---	---		
21			---	---					---	---		
22			---	---					---	---		
23			---	---					---	---		
24			---	---					---	---		
25			---	---					---	---		
26			---	---					---	---		
27			7.0	8.0					---	---		
28			---	---					---	---		
29			---	---					---	---		
30			---	---					---	---		
31			---	---					---	---		

09306237 DRY FORK NEAR RANGELY, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	.00			.00		---	.00		
2	.00			.00		---	.00		
3	.00			.00		---	.00		
4	.00			.00		---	.00		
5	.00			.00		---	.00		
6	.00			.00		---	.00		
7	.00			.00		---	.00		
8	.00			.00		---	.00		
9	.00			.00		---	.00		
10	.00			.00		---	.00		
11	.00			.00		---	.00		
12	.00			.00		---	.00		
13	.00			.00		---	.00		
14	.00			.00		---	.00		
15	.00			.00		---	.00		
16	.00			.00		---	.00		
17	.00			.00		---	.00		
18	.00			.00		---	.00		
19	.00			.00		---	.00		
20	.00			.00		---	.00		
21	.00			.00		---	.00		
22	.00			.00		---	.00		
23	.00			.00		---	.00		
24	.00			.00		---	.00		
25	.00			.00		---	.00		
26	.00			.00		---	.00		
27	.00			.01		2.0	.00		
28	.00			.00		---	.00		
29	.00			.00		---	.00		
30	.00			.00		---	.00		
31	---			.00		---	---		
TOTAL	0.00			0.01		2.0	0.00		

09306237 DRY FORK NEAR RANGELY, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JULY			AUGUST			SEPTEMBER	
1	.00			.00	---	---	.00		
2	.00			.00	---	---	.00		
3	.00			.00	---	---	.00		
4	.00			.00	---	---	.00		
5	.00			.00	---	---	.00		
6	.00			.00	---	---	.00		
7	.00			.00	---	---	.00		
8	.00			.00	---	---	.00		
9	.00			.00	---	---	.00		
10	.00			.00	---	---	.00		
11	.00			.00	---	---	.00		
12	.00			.00	---	---	.00		
13	.00			.00	---	---	.00		
14	.00			.00	---	---	.00		
15	.00			.00	---	---	.00		
16	.00			.08	4480	18	.00		
17	.00			.00	---	---	.00		
18	.00			.00	---	---	.00		
19	.00			.00	---	---	.00		
20	.00			.00	---	---	.00		
21	.00			.00	---	---	.00		
22	.00			.00	---	---	.00		
23	.00			.00	---	---	.00		
24	.00			.00	---	---	.00		
25	.00			.00	---	---	.00		
26	.00			.00	---	---	.00		
27	.00			.00	---	---	.00		
28	.00			.00	---	---	.00		
29	.00			.00	---	---	.00		
30	.00			.00	---	---	.00		
31	.00			.00	---	---	---		
TOTAL	0.00			0.08	---	18	0.00		
YEAR	0.09		20.0						

09306240 BOX ELDER GULCH NEAR RANGELY, CO

LOCATION.--Lat 39°53'18", long 108°31'40", in NE¼SW¼ sec.8, T.2 S., R.99 W., Rio Blanco County, Hydrologic Unit 14050006, on left bank 30 ft (9 m) upstream from unnamed tributary, 4.1 mi (6.6 km) upstream from mouth, and 20 mi (32 km) southeast of Rangely.

DRAINAGE AREA.--9.21 mi² (23.85 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1974 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 6,955 ft (2,120 m), from topographic map.

REMARKS.--Records good. No diversion or regulation above station.

AVERAGE DISCHARGE.--5 years, 0.20 ft³/s (0.006 m³/s), 145 acre-ft/yr (0.18 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 30 ft³/s (0.85 m³/s) Aug. 25, 1977, gage height, 2.33 ft (0.710 m); no flow most days each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4.3 ft³/s (0.122 m³/s) at 2130 May 24, gage height, 1.88 ft (0.573 m); no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	2.0	2.1	.07	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	2.0	1.8	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	1.9	1.8	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	1.9	1.7	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	1.9	1.5	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	1.9	1.5	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	2.2	1.5	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	2.3	1.5	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	2.4	1.4	.00	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	2.2	1.2	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	.00	2.3	1.0	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.06	2.2	1.0	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.05	2.2	.88	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	.16	2.4	.84	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.50	2.5	.76	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.86	2.6	.68	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	1.1	2.8	.62	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	1.4	3.0	.59	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	1.6	3.3	.55	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	1.5	3.5	.50	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	1.5	3.5	.40	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	1.5	3.2	.37	.01	.00	.00
23	.00	.00	.00	.00	.00	.00	1.5	3.3	.31	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	1.6	3.4	.27	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	1.7	3.2	.25	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	1.7	2.9	.21	.00	.00	.01
27	.00	.00	.00	.00	.00	.00	1.7	2.9	.17	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	1.9	2.8	.13	.00	.00	.00
29	.00	.00	.00	.00	---	.00	1.9	2.6	.06	.00	.00	.00
30	.00	.00	.00	.00	---	.00	1.8	2.5	.08	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	2.3	---	.00	.00	---
TOTAL	.00	.00	.00	.00	.00	.00	24.03	80.1	25.67	.08	.00	.01
MEAN	.000	.000	.000	.000	.000	.000	.80	2.58	.86	.003	.000	.000
MAX	.00	.00	.00	.00	.00	.00	1.9	3.5	2.1	.07	.00	.01
MIN	.00	.00	.00	.00	.00	.00	.00	1.9	.06	.00	.00	.00
AC-FT	.00	.00	.00	.00	.00	.00	48	159	51	.2	.00	.02

CAL YR 1978 TOTAL 114.88 MEAN .31 MAX 2.1 MIN .00 AC-FT 228
WTR YR 1979 TOTAL 129.89 MEAN .36 MAX 3.5 MIN .00 AC-FT 258

09306240 BOX ELDER GULCH NEAR RANGELY, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1974 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1974 to current year.
WATER TEMPERATURE: April 1974 to current year.
SUSPENDED-SEDIMENT DISCHARGE: March 1975 to current year.

INSTRUMENTATION.--Water-quality monitor since April 1974. Pumping sediment sampler since March 1975.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 980 micromhos June 21, 1979; minimum, 202 micromhos Mar. 22, 1978.
WATER TEMPERATURES: Maximum, 32.0°C June 20, 1978, June 29, 1979; minimum, 0.0°C Mar. 21-23, 1978, Apr. 20, May 7, 1979.
SEDIMENT CONCENTRATIONS: Maximum daily, 8,400 mg/L Apr. 1, 1978; no flow many days each year.
SEDIMENT LOADS: Maximum daily, 62 tons (56 t) May 19, 1979; no flow many days each year.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 980 micromhos June 21; minimum, 630 micromhos June 1.
WATER TEMPERATURES: Maximum, 32.0°C June 29; minimum, 0.0°C Apr. 20, May 7.
SEDIMENT CONCENTRATIONS: Maximum daily, 7,000 mg/L estimated May 19; no flow many days during year.
SEDIMENT LOADS: Maximum daily, 62 tons (56 t) May 19; no flow many days during year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
APR									
18...	1430	1.4	900	8.7	17.0	7.7	430	430	91
MAY									
08...	1215	2.2	850	8.5	9.0	9.2	370	--	66
JUN									
25...	1300	E.25	800	8.1	26.0	6.5	310	--	53

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)
APR								
18...	50	59	1.2	1.0	200	5.8	.4	21
MAY								
08...	49	52	1.2	.8	170	5.5	.3	23
JUN								
25...	44	57	1.4	.9	180	6.6	.3	22

DATE	TURBIDITY (NTU)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, (COLS. PER 100 ML)	SULFIDE TOTAL (MG/L AS S)	BROMIDE DISSOLVED (MG/L AS BR)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, DISSOLVED (UG/L AS BA)	BERYLLIUM, DISSOLVED (UG/L AS BE)
APR												
18...	590	150	3.6	K280	80	480	.0	.1	20	10	100	0

DATE	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)	LITHIUM DISSOLVED (UG/L AS LI)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, DISSOLVED (UG/L AS SE)	STRONTIUM, DISSOLVED (UG/L AS SR)
APR												
18...	0	0	2	10	0	4	10	.1	35	0	4	1300

E ESTIMATED.

K BASED ON NON-IDEAL COLONY COUNT.

09306240 BOX ELDER GULCH NEAR RANGELY, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	VANADIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)	GROSS ALPHA, DIS-SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS-SOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	RADIUM 226, DIS-SOLVED, RADON METHOD (PCI/L)	URANIUM DIS-SOLVED, EXTRACTION (UG/L)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)
APR 18...	4.7	10	<12	110	<4.5	57	<4.1	49	.10	4.2	13	.00

DATE	PHENOLS (UG/L)	METHYLENE BLUE ACTIVE SUB-STANCE (MG/L)	PCB, TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR-DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DI-AZINON, TOTAL (UG/L)	DI-ELDRIN TOTAL (UG/L)	ENDO-SULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)
APR 18...	1	.10	.0	.00	.0	.00	.00	.00	.00	.00	.00	.00

DATE	ETHION, TOTAL (UG/L)	HEPTA-CHLOR, TOTAL (UG/L)	HEPTA-CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	METHYL PARA-THION, TOTAL (UG/L)	METHYL TRI-THION, TOTAL (UG/L)	PARA-THION, TOTAL (UG/L)	TOX-APHENE, TOTAL (UG/L)	TOTAL TRI-THION (UG/L)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	SILVEX, TOTAL (UG/L)
APR 18...	.00	.00	.00	.00	.00	.00	.00	0	.00	.00	.00	.00

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							---	---	670	780		
2							---	---	705	---		
3							---	---	710	---		
4							---	---	740	---		
5							---	---	750	---		
6							---	---	750	---		
7							---	860	755	---		
8							---	850	770	---		
9							---	880	750	---		
10							---	900	760	---		
11							---	920	770	---		
12							---	910	750	---		
13							---	890	780	---		
14							---	860	790	---		
15							---	840	790	---		
16							---	820	780	---		
17							864	780	790	---		
18							870	768	820	---		
19							873	806	830	---		
20							876	783	810	---		
21							870	755	800	---		
22							843	---	744	---		
23							837	---	750	---		
24							834	790	740	---		
25							832	800	800	---		
26							818	790	800	---		
27							791	---	780	---		
28							766	800	779	---		
29							---	760	721	---		
30							---	770	731	---		
31							---	740	---	---		

09306240 BOX ELDER GULCH NEAR RANGELY, CO--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	13.0	4.5	18.5	2.5	29.0	11.0				
2	---	---	8.0	4.0	20.0	3.0	---	---				
3	---	---	5.5	2.5	20.0	3.5	---	---				
4	---	---	---	---	20.0	6.0	---	---				
5	---	---	---	---	22.0	5.5	---	---				
6	---	---	---	---	21.0	7.0	---	---				
7	---	---	7.0	.0	20.5	7.5	---	---				
8	---	---	11.0	1.0	10.0	6.0	---	---				
9	---	---	10.0	1.0	20.5	6.0	---	---				
10	---	---	12.0	1.5	25.5	4.5	---	---				
11	---	---	13.0	1.0	28.0	7.5	---	---				
12	---	---	20.0	1.0	28.0	8.0	---	---				
13	---	---	21.5	2.5	27.0	7.0	---	---				
14	---	---	21.5	3.0	24.0	7.5	---	---				
15	---	---	18.0	3.5	24.0	7.5	---	---				
16	---	---	16.5	5.5	26.0	5.0	---	---				
17	19.0	1.5	20.5	5.0	25.0	4.5	---	---				
18	17.0	1.5	21.0	6.0	20.5	7.0	---	---				
19	10.5	.5	20.5	5.0	20.5	5.0	---	---				
20	18.0	.0	20.0	4.5	27.5	4.0	---	---				
21	17.0	1.5	20.0	5.5	27.5	4.0	---	---				
22	18.5	1.5	20.0	5.5	30.0	5.5	---	---				
23	18.5	2.0	20.0	6.5	31.5	6.5	---	---				
24	15.5	3.5	15.0	7.0	31.0	6.5	---	---				
25	17.5	2.5	13.0	7.0	30.0	6.5	---	---				
26	19.0	.0	21.5	6.0	29.0	8.0	---	---				
27	20.0	1.0	---	---	29.5	7.5	---	---				
28	15.5	3.0	16.5	7.0	30.5	7.5	---	---				
29	14.5	1.0	15.5	6.0	32.0	7.5	---	---				
30	20.5	2.0	18.0	4.5	29.0	11.5	---	---				
31	---	---	15.5	3.0	---	---	---	---				

09306240 BOX ELDER GULCH NEAR RANGELY, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	.00	---	---	2.0	1000	5.4	2.1	330	1.9
2	.00	---	---	2.0	627	3.4	1.8	320	1.6
3	.00	---	---	1.9	522	2.7	1.8	225	1.1
4	.00	---	---	1.9	527	2.7	1.7	---	.87
5	.00	---	---	1.9	493	2.5	1.5	---	.65
6	.00	---	---	1.9	472	2.4	1.5	---	.55
7	.00	---	---	2.2	576	3.4	1.5	---	.49
8	.00	---	---	2.3	615	3.8	1.5	---	.42
9	.00	---	---	2.4	690	4.5	1.4	---	.33
10	.00	---	---	2.2	645	3.8	1.2	---	.23
11	.00	---	---	2.3	705	4.4	1.0	---	.15
12	.06	---	.03	2.2	750	4.5	1.0	36	.10
13	.05	---	.06	2.2	690	4.1	.88	28	.07
14	.16	---	.65	2.4	1020	6.6	.84	26	.06
15	.50	---	4.0	2.5	1680	11	.76	29	.06
16	.86	2700	6.3	2.6	5200	36	.68	19	.04
17	1.1	2970	8.8	2.8	---	32	.62	15	.02
18	1.4	3220	12	3.0	4540	37	.59	15	.02
19	1.6	2880	12	3.3	---	62	.55	13	.02
20	1.5	2530	10	3.5	---	58	.50	12	.02
21	1.5	3570	14	3.5	5200	49	.40	14	.02
22	1.5	2090	8.5	3.2	---	30	.37	19	.02
23	1.5	2480	10	3.3	2840	25	.31	17	.01
24	1.6	2520	11	3.4	2160	20	.27	29	.02
25	1.7	2310	11	3.2	1910	16	.25	16	.01
26	1.7	1810	8.3	2.9	1530	12	.21	12	.01
27	1.7	1800	8.3	2.9	---	10	.17	13	.01
28	1.9	1490	7.6	2.8	---	7.2	.13	9	.00
29	1.9	1350	6.9	2.6	---	5.6	.06	---	.00
30	1.8	910	4.4	2.5	520	3.5	.08	---	.00
31	---	---	---	2.3	420	2.6	---	---	---
TOTAL	24.03	---	143.84	80.1	---	471.1	25.67	---	8.80

09306240 BOX ELDER GULCH NEAR RANGELY, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JULY			AUGUST			SEPTEMBER	
1	.07		.00	.00			.00		---
2	.00		---	.00			.00		---
3	.00		---	.00			.00		---
4	.00		---	.00			.00		---
5	.00		---	.00			.00		---
6	.00		---	.00			.00		---
7	.00		---	.00			.00		---
8	.00		---	.00			.00		---
9	.00		---	.00			.00		---
10	.00		---	.00			.00		---
11	.00		---	.00			.00		---
12	.00		---	.00			.00		---
13	.00		---	.00			.00		---
14	.00		---	.00			.00		---
15	.00		---	.00			.00		---
16	.00		---	.00			.00		---
17	.00		---	.00			.00		---
18	.00		---	.00			.00		---
19	.00		---	.00			.00		---
20	.00		---	.00			.00		---
21	.00		---	.00			.00		---
22	.01		.10	.00			.00		---
23	.00		---	.00			.00		---
24	.00		---	.00			.00		---
25	.00		---	.00			.00		---
26	.00		---	.00			.01		.05
27	.00		---	.00			.00		---
28	.00		---	.00			.00		---
29	.00		---	.00			.00		---
30	.00		---	.00			.00		---
31	.00		---	.00			---		
TOTAL	0.08		0.10	0.00			0.01		0.05
YEAR	129.89		623.89						

09306241 BOX ELDER GULCH TRIBUTARY NEAR RANGELY, CO

LOCATION.--Lat 39°54'50", long 108°29'06", in SE¼SE¼ sec.34, T.1 S., R.99 W., Rio Blanco County, Hydrologic Unit 14050006, on right bank 880 ft (268 m) above mouth, 3.5 mi (5.6 km) west of 84 Ranch, and 20.5 mi (33.0 km) southwest of Rangely.

DRAINAGE AREA.--2.39 mi² (6.19 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1974 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 6,655 ft (2,028 m), from topographic map.

REMARKS.--Records excellent.

AVERAGE DISCHARGE.--5 years, 0.00 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5.0 ft³/s (0.14 m³/s) Sept. 11, 1977 (slope-area measurament); no flow most of each year.

EXTREMES FOR CURRENT YEAR.--No flow entire year.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1974 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1974 to current year.
WATER TEMPERATURE: April 1974 to current year.
SUSPENDED-SEDIMENT DISCHARGE: October 1974 to current year.

INSTRUMENTATION.--Water-quality monitor since April 1974. Pumping sediment sampler since October 1974.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 422 micromhos Sept. 11, 1977; minimum, 284 micromhos Sept. 11, 1977.
WATER TEMPERATURES: Not determined.
SEDIMENT CONCENTRATIONS: Maximum daily, 10,800 mg/L Feb. 28, 1976; no flow many days each year.
SEDIMENT LOADS: Maximum daily, 44 tons (40 t) Feb. 28, 1976; no flow many days each year.

EXTREMES FOR CURRENT YEAR.--No flow entire year.

09306242 CORRAL GULCH NEAR RANGELY, CO

LOCATION.--Lat 39°55'13", long 108°28'20", in SE¼NW¼ sec.35, T.1 S., R.99 W., Rio Blanco County, Hydrologic Unit 14050006, on left bank 5 ft (2 m) downstream from Boxelder Creek, 3.5 mi (5.6 km) upstream from confluence with Stake Springs Draw, and 21 mi (34 km) southeast of Rangely.

DRAINAGE AREA.--31.6 mi² (81.8 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1974 to current year.

GAGE.--Water-stage recorder. Concrete control since July 20, 1974. Altitude of gage is 6,570 ft (2,003 m), from topographic map.

REMARKS.--Records good. No diversion above station. Flow not all natural as ground water from mining operations upstream from the gage is included.

AVERAGE DISCHARGE.--5 years, 1.42 ft³/s (0.040 m³/s), 1,030 acre-ft/yr (1.27 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 183 ft³/s (5.18 m³/s) July 23, 1977, gage height, 3.89 ft (1.186 m); minimum daily, 0.06 ft³/s (0.002 m³/s) Apr. 10-14, 1974.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 48 ft³/s (1.36 m³/s) at 1630 May 27, gage height, 2.93 ft (0.893 m); minimum daily, 0.61 ft³/s (0.017 m³/s) June 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.6	2.8	1.8	2.2	2.3	3.4	6.2	6.2	6.3	.68	2.1	4.8
2	2.3	1.6	1.8	2.2	1.9	3.8	4.7	5.6	6.0	.68	1.9	4.4
3	2.3	1.6	1.7	2.3	2.1	4.5	5.0	5.7	6.5	.76	1.7	3.6
4	2.7	1.5	1.7	2.3	1.9	4.4	5.8	5.1	5.6	1.7	2.2	4.0
5	2.4	1.5	1.9	2.4	2.0	4.3	5.7	5.4	5.6	1.3	2.2	4.1
6	2.6	1.7	1.8	2.5	1.8	3.6	5.7	5.4	6.9	.65	1.8	3.3
7	2.6	2.1	1.9	2.6	1.8	4.5	5.7	5.6	6.0	.61	1.8	4.0
8	2.8	1.8	1.9	2.3	1.8	4.2	5.4	5.7	7.1	1.1	1.7	4.3
9	2.8	1.6	1.8	2.5	2.0	3.9	4.8	5.2	7.4	1.3	1.8	4.0
10	2.8	2.5	1.8	2.3	2.1	4.2	5.0	5.2	7.1	1.2	2.1	4.3
11	2.8	2.4	2.1	2.5	2.1	4.3	5.1	5.2	6.2	2.2	2.3	4.0
12	3.2	2.6	2.2	2.5	2.3	4.5	5.1	5.2	4.8	1.8	1.7	4.1
13	3.3	2.3	1.9	2.6	2.2	4.8	5.6	5.6	3.9	3.0	1.8	4.1
14	3.4	1.5	1.9	2.6	2.3	3.9	5.4	5.8	3.6	4.5	1.7	4.1
15	3.4	1.4	2.0	2.5	2.3	4.5	5.4	5.3	4.2	4.4	2.7	3.8
16	3.2	1.4	2.0	2.6	2.3	4.4	5.1	7.6	4.6	4.0	3.0	4.1
17	2.9	1.3	2.0	2.6	2.0	4.3	5.5	7.1	4.4	3.5	2.8	3.1
18	2.3	1.3	2.2	2.8	2.1	4.3	5.6	7.4	4.4	1.8	2.8	2.4
19	2.3	1.3	2.3	2.9	1.6	4.2	6.0	8.4	5.0	1.8	1.3	2.5
20	2.5	1.4	2.3	2.9	1.8	3.6	5.2	8.9	4.4	1.7	1.0	2.2
21	3.2	1.4	2.3	2.5	2.2	3.4	5.6	9.6	4.0	1.8	.80	2.0
22	3.2	1.4	2.3	2.5	2.1	4.3	5.4	9.4	4.1	1.9	.55	1.6
23	3.3	1.5	2.3	2.2	2.8	5.4	5.4	8.4	3.2	1.7	.89	1.8
24	3.3	1.5	2.0	2.2	3.1	5.6	5.4	9.6	2.2	1.9	.55	1.5
25	3.1	1.6	2.2	2.3	2.7	5.6	5.5	11	2.1	2.2	1.3	1.5
26	2.9	1.6	2.3	2.0	3.0	5.8	5.6	8.9	2.1	2.8	1.9	1.5
27	2.9	1.6	2.3	2.2	2.7	5.7	5.7	12	1.8	2.0	1.4	1.6
28	3.0	1.6	2.3	2.1	2.9	5.6	5.8	8.0	1.7	2.0	1.4	1.6
29	3.1	1.7	2.5	2.2	---	6.2	6.0	7.4	.95	2.0	1.3	1.6
30	3.1	2.0	2.4	2.0	---	5.8	5.8	7.2	.61	1.8	3.0	1.7
31	3.0	---	2.3	2.0	---	6.3	---	6.9	---	2.2	4.4	---
TOTAL	89.3	51.5	64.2	74.3	62.2	143.3	164.2	220.0	132.76	60.98	58.59	91.7
MEAN	2.88	1.72	2.07	2.40	2.22	4.62	5.47	7.10	4.43	1.97	1.89	3.06
MAX	3.4	2.8	2.5	2.9	3.1	6.3	6.2	12	7.4	4.5	4.4	4.8
MIN	2.3	1.3	1.7	2.0	1.6	3.4	4.7	5.1	.61	.61	.55	1.5
AC-FT	177	102	127	147	123	284	326	436	263	121	116	182

CAL YR 1978 TOTAL 889.83 MEAN 2.44 MAX 6.7 MIN .14 AC-FT 1760
WTR YR 1979 TOTAL 1213.03 MEAN 3.32 MAX 12 MIN .61 AC-FT 2410

09306242 CORRAL GULCH NEAR RANGELY, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--March 1974 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1975 to current year.
WATER TEMPERATURE: January 1975 to current year.
SUSPENDED-SEDIMENT DISCHARGE: October 1974 to current year.

INSTRUMENTATION.--Water-quality monitor since October 1974. Pumping sediment sampler since October 1974.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 3,000 micromhos July 17, 1976; minimum, 455 micromhos Aug. 24, 1977.
WATER TEMPERATURES: Maximum, 29.0°C Aug. 5, 1979; minimum, 0.0°C on several days during winter months some years.
SEDIMENT CONCENTRATIONS: Maximum daily, 88,000 mg/L, estimated Sept. 11, 1977; minimum daily, 4 mg/L Dec. 5, 1977.
SEDIMENT LOADS: Maximum daily, 1,400 tons, estimated (1,300 t) Sept. 11, 1977; minimum daily, 0.005 ton (0.005 t) on many days during 1977.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 2,050 micromhos May 26; minimum, 678 micromhos May 27.
WATER TEMPERATURES: Maximum, 29.0°C Aug. 5; minimum, 2.5°C Dec. 7, 8, Jan. 1, 2, 24, 30.
SEDIMENT CONCENTRATIONS: Maximum daily, 14,000 mg/L, estimated May 25; minimum daily, 8 mg/L July 1.
SEDIMENT LOADS: Maximum daily, 49 tons (44 t), estimated June 25; minimum daily, 0.01 ton (0.01 t) many days during year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO
OCT 24...	1000	3.3	1400	7.9	9.0	9.5	440	--	58	71	180	3.7
NOV 21...	1120	1.5	1500	7.7	8.0	9.8	520	--	80	78	150	2.9
DEC 06...	1215	1.4	1450	7.5	5.5	9.0	530	--	82	78	170	3.2
JAN 24...	1150	2.2	1450	7.8	7.0	9.6	480	--	65	78	170	3.4
FEB 22...	1520	2.1	1500	7.8	8.0	7.2	510	--	72	79	170	3.3
APR 03...	1540	5.7	1480	8.1	7.0	7.1	430	--	48	75	180	3.8
06...	1420	5.7	1390	7.8	16.5	5.6	400	0	40	73	190	4.1
24...	0955	6.0	1350	7.7	13.5	7.0	420	14	52	70	140	3.0
MAY 08...	1330	5.8	1060	8.1	13.5	7.1	400	--	68	56	85	1.8
JUN 25...	1340	1.1	1400	7.8	20.5	6.5	420	--	62	64	130	2.8
JUL 16...	1040	4.2	1400	8.2	19.5	6.7	450	0	42	83	190	3.6
AUG 21...	1100	.63	1380	8.1	16.5	7.3	0	0	--	--	--	--
SEP 18...	1205	2.6	1450	7.7	19.5	7.5	420	0	41	76	190	4.1

09306242 CORRAL GULCH NEAR RANGELY, CO--Continued

DATE	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER DAY)	BORON, DISSOLVED (UG/L AS B)	CARBON, ORGANIC DISSOLVED (MG/L AS C)
OCT 24...	1.9	--	--	--	330	11	1.0	31	--	--	--	--
NOV 21...	1.3	--	--	--	400	10	.5	23	--	--	--	--
DEC 06...	1.8	--	--	--	--	18	.5	22	--	--	--	--
JAN 24...	1.6	--	--	--	380	11	.8	27	--	--	--	--
FEB 22...	1.0	--	--	--	400	11	.8	23	--	--	--	--
APR 03...	.5	--	--	--	370	9.9	1.2	25	--	--	--	--
06...	.5	550	6	450	350	9.3	1.3	25	961	14.8	160	4.4
24...	.7	500	0	410	310	8.2	.9	24	862	14.0	130	8.2
MAY 08...	1.2	--	--	--	240	7.4	.4	22	--	--	--	--
JUN 25...	1.2	--	--	--	350	14	.7	22	--	--	--	--
JUL 16...	.8	--	--	470	360	9.9	1.4	24	994	11.3	120	4.6
AUG 21...	1.0	--	--	460	410	11	.9	--	701	1.19	150	23
SEP 18...	.6	--	--	450	410	7.9	1.4	25	1030	7.23	150	5.0

DATE	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (NTU)	NITROGEN, DISSOLVED (MG/L AS N)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	SULFIDE TOTAL (MG/L AS S)	BROMIDE DISSOLVED (MG/L AS BR)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)
APR 24...	5	6.0	1.5	44	2.4	K80	<1	.4	.1	.84
SEP 18...	20	10	.99	19	--	--	--	.0	.1	.22

DATE	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, DISSOLVED (UG/L AS BA)	BERYLLIUM, DISSOLVED (UG/L AS BE)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)
APR 24...	.06	.60	.34	.00	0	7	90	<1	<1	0
SEP 18...	.32	.45	.03	.00	20	3	70	<1	<1	10

K BASED ON NON-IDEAL COLONY COUNT.

09306242 CORRAL GULCH NEAR RANGELY, CO--Continued

DATE	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)
APR										
24...	0	10	0	60	30	.2	40	0	1	5000
SEP										
18...	1	20	0	80	20	.0	14	0	0	7000

DATE	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)	GROSS ALPHA, DIS-SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS-SOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	RADIUM 226, DIS-SOLVED, RADON METHOD (PCI/L)	URANIUM DIS-SOLVED, EXTRAC-TION (UG/L)
APR										
24...	1.7	<3	<16	42	<5.9	17	<5.4	14	.13	3.3
SEP										
18...	<1.0	<3	<15	1.0	<5.7	.7	<5.8	.7	.07	.53

DATE	TIME	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	PCB, TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR-DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)
APR									
24...	0955	.00	5	.00	.0	.00	.0	.00	.00
SEP									
18...	1205	.00	1	.00	.0	.00	.0	.00	.00

DATE	DDT, TOTAL (UG/L)	DI-AZINON, TOTAL (UG/L)	DI-ELDRIN TOTAL (UG/L)	ENDO-SULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	ETHION, TOTAL (UG/L)	HEPTA-CHLOR, TOTAL (UG/L)	HEPTA-CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)
APR									
24...	.00	.00	.00	.00	.00	.00	.00	.00	.00
SEP									
18...	.00	.00	.00	.00	.00	.00	.00	00	.00

DATE	METHYL PARA-THION, TOTAL (UG/L)	METHYL TRI-THION, TOTAL (UG/L)	PARA-THION, TOTAL (UG/L)	TOX-APHENE, TOTAL (UG/L)	TOTAL TRI-THION (UG/L)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	SILVEX, TOTAL (UG/L)
APR								
24...	.00	.00	.00	0	.00	.00	.00	.00
SEP								
18...	.00	.00	.00	0	.00	.00	.00	.00

09306242 CORRAL GULCH NEAR RANGELY, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	PHOSPHORUS, TOTAL IN BOT. MAT. (MG/KG AS P)	ALUMINUM, RECOV. FM BOTTOM MATERIAL (UG/G)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)
AUG								
02...	0800	350	560	3	0	2	0	3
02...	0810	500	3200	4	0	5	0	8
02...	0820	280	600	3	0	2	0	3
02...	0830	450	2800	3	0	4	3	6
02...	0840	430	1500	3	0	4	5	8

DATE	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG)	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	CARBON, ORGANIC TOT. IN BOTTOM MAT. (G/KG AS C)	CARBON, INORGANIC, TOT IN BOT MAT (G/KG AS C)
AUG								
02...	2200	0	240	.01	0	16	3.1	2.3
02...	4000	8	260	.01	0	18	15	.2
02...	2400	0	150	.01	0	12	3.7	.1
02...	5800	3	250	.02	0	30	46	.2
02...	4000	7	260	.03	0	24	13	5.3

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1450	1400	1420	1410	1430	1410	1370	1310	1330	1370	1330	1390
2	1460	1440	1430	1410	1350	1420	1390	1320	1370	1370	1320	1390
3	1460	1470	1440	1400	1380	1380	1430	1350	1370	1410	1320	1390
4	1440	1400	1460	1410	1410	1390	1420	---	1380	1450	1290	1380
5	1430	1460	1440	1410	1390	1390	1430	---	1400	1410	1220	1390
6	1440	1480	1440	1410	1410	1380	1450	---	1400	1380	1210	1390
7	1430	1440	1430	1400	1430	1380	1420	1360	1400	1380	1210	1400
8	1430	1470	1450	1410	1470	1390	1400	1350	1370	1420	1190	1390
9	1420	1420	1450	1410	1460	1380	1420	1370	1390	1420	1190	1390
10	1440	1430	1440	1420	1430	1350	1420	1380	1390	1430	1200	1390
11	1430	1380	1430	1410	1430	1300	1380	1380	1390	1340	1200	1390
12	1430	1360	1420	1420	1430	1270	1380	1380	1380	1350	1200	1380
13	1440	1510	1420	1400	1440	1320	1390	1390	1400	1350	1190	1380
14	1410	1480	1430	1390	1430	1420	1410	1380	1390	1360	1260	1390
15	1410	1460	1420	1390	1310	1390	1430	1350	---	1360	1370	1390
16	1430	1430	1420	1410	1250	1390	1440	1380	---	1370	1350	1390
17	1420	1390	1420	1400	1420	1380	1390	1360	---	1380	1330	1400
18	1430	1420	1420	1420	1420	1360	1400	1350	---	1360	1340	1420
19	1430	1410	1420	1400	1450	1370	1380	1340	---	1340	1350	1420
20	1390	1400	1410	1380	1460	1380	1390	1340	---	1340	1340	1420
21	1390	1390	1400	1400	1450	1360	1380	1310	1410	1320	1420	1420
22	1430	1430	1420	1390	1430	1380	1360	1370	1400	1300	1410	1420
23	1430	1390	1420	1400	1400	1410	1350	1440	1390	1330	1400	1410
24	1420	1390	1440	1400	1390	1420	1350	1550	1370	1330	1410	1410
25	1400	1380	1420	1410	1420	1440	1350	1670	1370	1360	1420	1410
26	1420	1420	1420	1450	1390	1440	1350	1710	1370	1320	1410	1420
27	1440	1380	1420	1410	1420	1420	1360	1610	1380	1280	1390	1420
28	1390	1410	1430	1400	1410	1410	1360	1680	1390	1270	1380	1420
29	1330	1450	1420	1400	---	1390	1340	1510	1410	1280	1380	1420
30	1390	1440	1400	1410	---	1390	1340	1260	1380	1300	1390	1430
31	1370	---	1400	1420	---	1380	---	1280	---	1320	1390	---
MEAN	1420	1420	1430	1410	1410	1380	1390	1410	1380	1350	1320	1400

WTR YR 1979 MEAN 1390 MAX 1710 MIN 1190

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	18.5	10.5	15.5	8.0	9.0	6.0	6.0	2.5	9.5	4.0	13.0	4.0
2	18.0	8.5	15.5	8.0	7.5	4.0	7.5	2.5	9.5	4.5	14.5	9.5
3	18.0	7.0	14.0	7.5	7.5	3.5	8.5	5.5	8.5	3.5	16.0	10.0
4	18.0	7.5	13.0	7.0	9.5	6.0	9.0	6.5	9.5	3.0	16.0	10.0
5	17.0	7.0	13.0	7.0	8.0	4.5	9.5	6.5	9.0	3.5	14.5	10.5
6	17.0	7.0	12.0	5.5	6.5	4.5	8.5	6.5	10.0	6.0	16.5	13.0
7	18.0	7.5	12.5	5.5	7.0	2.5	8.0	4.5	11.0	5.5	17.0	12.5
8	15.5	7.5	13.0	6.0	7.0	2.5	8.5	3.5	10.5	5.5	16.5	11.5
9	17.0	7.5	12.0	6.5	8.0	4.5	9.0	4.5	11.5	5.0	15.5	11.0
10	16.0	7.5	11.0	7.5	8.5	4.0	9.0	7.0	11.0	5.5	18.0	10.5
11	17.0	8.0	11.0	6.5	8.5	4.5	10.0	7.5	11.0	6.0	18.0	9.5
12	17.0	8.0	12.0	7.0	9.0	5.5	10.0	7.0	12.5	7.5	18.0	10.5
13	15.0	7.0	12.0	6.0	8.0	4.0	9.0	5.5	12.0	7.5	17.5	12.0
14	16.5	7.0	8.5	7.0	9.5	5.0	8.5	5.0	10.5	7.0	15.5	9.0
15	17.0	7.0	8.5	6.0	9.0	5.0	9.0	5.0	13.0	6.5	18.0	12.0
16	15.5	8.0	9.0	5.5	8.0	3.0	9.5	7.0	14.5	6.5	17.0	12.5
17	15.5	8.5	9.0	5.0	9.0	4.5	10.5	6.5	12.5	5.0	18.0	12.0
18	15.5	10.0	8.5	5.0	10.0	8.0	12.0	8.0	12.0	4.5	16.0	12.5
19	17.0	8.5	9.0	5.0	8.0	7.0	9.5	6.0	9.5	5.5	17.0	13.0
20	13.5	9.0	9.5	5.5	8.5	4.5	9.5	5.5	11.5	6.0	17.0	13.0
21	13.0	10.5	9.0	6.0	9.0	5.5	10.5	4.0	9.5	6.0	17.0	10.5
22	13.0	9.5	8.5	5.5	9.5	5.5	8.0	5.0	9.5	6.0	15.5	12.0
23	15.5	7.5	9.0	4.5	8.5	5.5	9.0	4.5	12.5	5.0	17.0	12.5
24	15.0	8.5	8.5	4.0	9.5	4.0	9.0	2.5	14.5	7.5	17.5	13.0
25	15.5	9.0	9.5	5.0	9.0	5.0	10.0	7.0	14.5	6.5	18.0	13.0
26	14.0	6.5	9.0	6.0	8.5	4.5	7.5	4.0	14.0	8.5	17.5	13.5
27	15.0	7.5	8.5	4.0	9.5	5.5	9.0	3.0	12.5	8.0	16.5	14.0
28	15.5	7.0	8.5	4.0	8.5	6.0	9.0	3.5	14.5	6.0	16.5	11.5
29	15.5	7.0	9.0	5.5	8.5	5.5	8.0	4.5	---	---	15.5	13.5
30	14.0	8.0	12.0	6.0	8.5	4.5	8.0	2.5	---	---	16.5	12.5
31	12.5	7.5	---	---	7.0	3.5	8.5	4.0	---	---	15.5	13.0

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	16.5	13.0	18.5	12.0	20.0	13.0	18.0	10.0	27.0	14.5	22.0	16.5
2	16.0	11.0	17.0	12.5	20.5	13.5	19.5	10.0	23.5	15.5	21.5	15.5
3	16.5	10.5	14.5	13.0	20.5	14.0	19.0	10.0	27.0	13.5	21.5	16.5
4	16.0	12.5	---	---	22.0	15.0	23.5	12.5	28.5	15.0	19.5	16.0
5	17.0	11.5	---	---	22.5	15.0	25.0	10.5	29.0	15.5	21.0	15.0
6	18.0	11.0	---	---	22.0	15.5	17.5	10.0	23.5	16.5	21.0	14.5
7	17.5	10.5	14.0	13.0	22.0	15.5	21.5	9.5	23.0	12.5	20.0	14.5
8	18.5	13.0	15.0	11.5	17.0	14.0	23.5	9.5	23.0	17.0	19.5	17.5
9	17.5	13.5	16.5	11.0	20.5	13.5	22.0	10.5	23.5	16.5	19.5	15.5
10	14.5	13.5	17.5	12.0	22.0	13.5	25.5	11.5	27.0	15.5	19.5	16.5
11	16.5	12.5	17.5	12.0	24.5	14.0	22.5	16.5	23.0	14.5	20.5	14.5
12	17.5	12.5	19.0	12.0	24.5	13.5	23.5	14.5	23.0	16.0	19.5	14.5
13	17.0	12.5	20.0	13.0	23.5	13.0	22.5	16.5	22.5	16.5	18.5	14.5
14	18.0	13.0	20.5	13.5	21.0	16.5	22.5	17.0	20.0	16.0	18.5	14.0
15	18.5	13.5	20.0	12.5	---	---	22.0	16.5	20.5	15.0	18.5	12.0
16	19.0	13.0	19.0	13.0	---	---	22.0	17.5	19.0	17.0	19.0	14.0
17	18.5	13.0	20.5	13.5	---	---	22.5	17.0	20.5	16.5	19.5	14.0
18	18.0	13.5	21.0	14.5	---	---	24.5	16.5	21.0	16.5	19.5	13.0
19	17.5	12.0	21.0	13.5	---	---	23.0	15.0	20.5	12.5	19.5	13.5
20	18.0	12.0	22.0	14.5	---	---	21.5	15.5	18.0	12.0	19.5	14.0
21	18.5	12.0	22.0	14.0	20.0	15.5	21.0	16.0	24.0	10.0	20.0	13.5
22	19.0	11.5	22.0	14.5	20.5	15.5	21.0	16.0	22.5	10.5	19.5	12.5
23	19.0	11.5	23.0	14.0	21.0	16.0	25.5	16.5	25.0	10.0	19.5	13.0
24	18.0	12.0	19.0	15.0	22.5	15.0	23.0	16.0	25.5	10.5	21.0	13.0
25	18.5	12.0	20.0	16.5	23.5	15.0	27.5	15.5	24.0	11.0	19.5	13.0
26	19.0	11.0	22.0	16.0	22.5	15.5	25.5	15.5	23.0	12.0	19.5	14.0
27	19.0	11.5	20.5	13.0	21.5	15.5	23.0	16.0	22.5	9.5	19.5	13.0
28	18.5	12.5	20.5	16.5	24.5	12.5	23.0	16.0	26.0	12.0	19.0	12.5
29	20.0	11.5	19.5	15.0	22.5	11.0	23.0	16.0	22.5	10.5	19.0	12.5
30	19.5	12.0	20.0	13.5	20.0	10.0	23.5	15.5	21.5	14.5	19.0	12.5
31	---	---	19.0	13.0	---	---	24.0	15.5	21.0	15.5	---	---

09306242 CORRAL GULCH NEAR RANGELY, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	2.6	707	5.3	2.8	144	1.1	1.8	286	1.4
2	2.3	410	2.8	1.6	61	.26	1.8	284	1.4
3	2.3	141	.89	1.6	41	.18	1.7	---	1.0
4	2.7	281	2.3	1.5	41	.17	1.7	---	1.0
5	2.4	88	.55	1.5	23	.09	1.9	---	2.0
6	2.6	153	1.0	1.7	67	.31	1.8	274	1.3
7	2.6	98	.69	2.1	246	1.4	1.9	350	1.6
8	2.8	148	1.2	1.8	308	1.5	1.9	---	1.6
9	2.8	152	1.2	1.6	611	2.6	1.8	---	2.0
10	2.8	95	.72	2.5	636	4.3	1.8	---	2.5
11	2.8	95	.72	2.4	242	1.6	2.1	---	3.0
12	3.2	159	1.4	2.6	278	2.0	2.2	---	3.5
13	3.3	132	1.2	2.3	250	1.6	1.9	669	3.8
14	3.4	---	1.1	1.5	70	.28	1.9	496	2.7
15	3.4	---	1.0	1.4	42	.16	2.0	309	1.7
16	3.2	---	1.0	1.4	58	.22	2.0	508	2.8
17	2.9	---	.85	1.3	36	.13	2.0	308	1.7
18	2.3	---	1.0	1.3	33	.12	2.2	546	3.3
19	2.3	---	1.0	1.3	23	.08	2.3	901	5.4
20	2.5	---	6.0	1.4	88	.33	2.3	873	5.2
21	3.2	---	5.5	1.4	291	1.1	2.3	1010	6.1
22	3.2	---	5.5	1.4	367	1.4	2.3	692	4.2
23	3.3	---	5.5	1.5	256	1.0	2.3	623	3.8
24	3.3	620	5.5	1.5	---	1.0	2.0	799	5.1
25	3.1	660	5.9	1.6	---	1.0	2.2	726	4.7
26	2.9	---	5.2	1.6	---	1.1	2.3	818	5.1
27	2.9	---	5.5	1.6	---	1.1	2.3	475	3.0
28	3.0	---	4.0	1.6	282	1.2	2.3	484	3.1
29	3.1	---	3.0	1.7	414	1.9	2.5	394	2.5
30	3.1	310	2.6	2.0	2180	12	2.4	347	2.2
31	3.0	200	1.6	---	---	---	2.3	238	1.4
TOTAL	89.3	---	81.72	51.5	---	41.23	64.2	---	90.1

09306242 CORRAL GULCH NEAR RANGELY, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JANUARY			FEBRUARY			MARCH	
1	2.2	218	1.4	2.3	237	1.3	3.4	5450	64
2	2.2	262	1.6	1.9	149	.81	3.8	6770	71
3	2.3	1380	9.9	2.1	423	2.4	4.5	3080	41
4	2.3	610	4.0	1.9	213	1.2	4.4	2880	37
5	2.4	745	5.0	2.0	339	1.9	4.3	3620	49
6	2.5	635	4.3	1.8	276	1.5	3.6	2330	29
7	2.6	668	4.7	1.8	282	1.4	4.5	2790	40
8	2.3	483	3.2	1.8	428	2.2	4.2	3840	52
9	2.5	433	2.9	2.0	790	4.4	3.9	2110	26
10	2.3	361	2.4	2.1	905	5.6	4.2	1640	20
11	2.5	383	2.5	2.1	1130	7.5	4.3	1590	21
12	2.5	579	3.8	2.3	1080	6.8	4.5	1170	16
13	2.6	496	3.4	2.2	1230	7.8	4.8	1090	16
14	2.6	514	3.3	2.3	1560	9.6	3.9	965	11
15	2.5	382	2.5	2.3	1720	11	4.5	1300	18
16	2.6	552	3.6	2.3	1740	12	4.4	1330	17
17	2.6	444	3.1	2.0	---	10	4.3	1080	13
18	2.8	1160	9.5	2.1	---	10	4.3	1160	15
19	2.9	1130	8.8	1.6	---	9.0	4.2	1150	16
20	2.9	1140	8.8	1.8	---	8.0	3.6	793	8.1
21	2.5	824	6.2	2.2	---	7.0	3.4	810	10
22	2.5	626	4.5	2.1	1160	6.6	4.3	631	7.7
23	2.2	444	3.1	2.8	2370	22	5.4	1180	17
24	2.2	650	4.2	3.1	2890	26	5.6	992	15
25	2.3	483	3.0	2.7	3440	26	5.6	800	12
26	2.0	428	2.5	3.0	1900	15	5.8	952	15
27	2.2	352	2.0	2.7	1560	11	5.7	1050	16
28	2.1	380	2.2	2.9	3280	29	5.6	---	15
29	2.2	396	2.4	---	---	---	6.2	---	14
30	2.0	398	2.3	---	---	---	5.8	---	12
31	2.0	338	2.0	---	---	---	6.3	---	10
TOTAL	74.3	---	123.1	62.2	---	257.01	143.3	---	723.8

09306242 CORRAL GULCH NEAR RANGELY, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	6.2	---	8.0	6.2	2130	36	6.3	1560	28
2	4.7	453	6.7	5.6	5750	90	6.0	1380	24
3	5.0	349	5.0	5.7	812	13	6.5	2600	55
4	5.8	549	8.7	5.1	444	6.4	5.6	1940	27
5	5.7	561	8.7	5.4	251	3.7	5.6	2010	32
6	5.7	553	8.1	5.4	185	2.7	6.9	2890	50
7	5.7	599	9.0	5.6	280	4.2	6.0	---	35
8	5.4	450	6.5	5.7	602	9.3	7.1	---	50
9	4.8	296	3.8	5.2	500	7.0	7.4	---	40
10	5.0	296	4.0	5.2	841	12	7.1	---	30
11	5.1	328	4.5	5.2	420	5.9	6.2	---	25
12	5.1	328	4.5	5.2	340	4.8	4.8	---	15
13	5.6	296	4.5	5.6	500	8.1	3.9	---	7.5
14	5.4	320	4.7	5.8	684	11	3.6	433	3.9
15	5.4	368	5.4	5.3	2550	26	4.2	775	9.1
16	5.1	256	3.5	7.6	3420	68	4.6	522	6.8
17	5.5	370	5.3	7.1	2020	39	4.4	332	4.0
18	5.6	723	9.8	7.4	2100	45	4.4	357	4.2
19	6.0	815	13	8.4	6510	157	5.0	352	4.2
20	5.2	640	9.0	8.9	6120	162	4.4	899	10
21	5.6	801	12	9.6	2550	69	4.0	537	5.6
22	5.4	479	7.2	9.4	---	78	4.1	255	2.8
23	5.4	536	7.8	8.4	3840	87	3.2	229	2.1
24	5.4	592	8.6	9.6	---	70	2.2	88	.52
25	5.5	896	13	11	---	90	2.1	103	.53
26	5.6	880	13	8.9	---	60	2.1	63	.36
27	5.7	880	14	12	---	90	1.8	---	.28
28	5.8	755	12	8.0	---	65	1.7	31	.14
29	6.0	752	12	7.4	1810	37	.95	16	.04
30	5.8	1640	26	7.2	2940	59	.61	66	.20
31	---	---	---	6.9	1380	28	---	---	---
TOTAL	164.2	---	258.3	220.0	---	1444.1	132.76	---	473.27

09306242 CORRAL GULCH NEAR RANGELY, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JULY			AUGUST			SEPTEMBER	
1	.68	---	.15	2.1	193	1.5	4.8	---	23
2	.68	18	.03	1.9	---	.51	4.4	---	11
3	.76	63	.16	1.7	---	.46	3.6	---	3.5
4	1.7	168	.77	2.2	---	.89	4.0	109	1.2
5	1.3	---	.70	2.2	---	1.2	4.1	201	2.2
6	.65	---	.50	1.8	---	.44	3.3	223	2.0
7	.61	---	.40	1.8	---	.35	4.0	201	2.1
8	1.1	---	.60	1.7	105	.53	4.3	---	2.1
9	1.3	146	.59	1.8	70	.38	4.0	---	1.9
10	1.2	115	.57	2.1	537	3.7	4.3	---	1.9
11	2.2	---	.60	2.3	258	1.8	4.0	---	1.6
12	1.8	145	.63	1.7	180	.83	4.1	---	1.4
13	3.0	---	6.0	1.8	47	.23	4.1	140	1.5
14	4.5	---	5.0	1.7	111	.64	4.1	125	1.3
15	4.4	---	4.0	2.7	553	4.2	3.8	94	.94
16	4.0	310	3.5	3.0	1440	19	4.1	61	.68
17	3.5	257	2.6	2.8	600	5.0	3.1	46	.39
18	1.8	137	.66	2.8	140	1.1	2.4	103	.68
19	1.8	73	.34	1.3	140	.49	2.5	88	.59
20	1.7	---	.83	1.0	360	1.6	2.2	85	.49
21	1.8	---	.29	.80	240	1.2	2.0	65	.36
22	1.9	---	.26	.65	167	.73	1.6	80	.35
23	1.7	514	2.4	.89	660	1.9	1.8	80	.39
24	1.9	42	.22	.65	---	.21	1.6	62	.27
25	2.2	2610	17	1.3	---	2.5	1.5	49	.20
26	2.8	---	33	1.9	---	3.7	1.5	43	.18
27	2.0	113	.58	1.4	571	2.0	1.6	57	.24
28	2.0	35	.19	1.4	563	2.4	1.6	55	.25
29	2.0	68	.37	1.8	451	2.3	1.6	32	.15
30	1.8	63	.32	3.0	1580	16	1.7	34	.16
31	2.2	138	.94	4.4	---	30	---	---	---
TOTAL	60.98	---	84.20	58.59	---	107.79	91.7	---	63.02
YEAR	1213.03		3747.64						

09306255 YELLOW CREEK NEAR WHITE RIVER, CO

LOCATION.--Lat 40°10'07", long 108°24'02", in NE¼SW¼ sec.4, T.2 N., R.98 W., Rio Blanco County, Hydrologic Unit 14050006, on left bank 160 ft (49 m) downstream from bridge on State Highway 64, 0.3 mi (0.5 km) upstream from mouth, and 10 mi (16 km) northwest of White River City.

DRAINAGE AREA.--262 mi² (679 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1972 to current year.

GAGE.--Water-stage recorder. Concrete control since Sept. 18, 1974. Altitude of gage is 5,535 ft (1,687 m), from topographic map.

REMARKS.--Records good except those for winter period, which are fair. Diversions for irrigation of about 300 acres (1.21 km²) above station.

AVERAGE DISCHARGE.--7 years, 1.71 ft³/s (0.048 m³/s), 1,240 acre-ft/yr (1.53 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,800 ft³/s (193 m³/s) Sept. 7, 1978, gage height, 12.97 ft (3.953 m), from contracted opening and flow over road measurement of peak flow; no flow several days.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 25, 1965, reached a discharge of 1,050 ft³/s (29.7 m³/s) by slope-area measurement of peak flow.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 144 ft³/s (4.08 m³/s) at 1530 July 21, gage height, 6.92 ft (2.109 m), only peak above base of 100 ft³/s (2.8 m³/s); no flow Dec. 15-Jan. 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.28	.94	.60	.00	.01	1.4	3.6	2.8	2.0	1.7	1.5	1.3
2	.26	.94	.60	.00	.01	1.5	2.8	2.8	2.0	1.8	1.5	1.2
3	.28	.97	.60	.00	.00	1.7	2.3	2.9	2.0	1.8	1.5	1.3
4	.30	1.0	.60	.00	.00	1.9	2.2	3.0	2.0	1.8	1.4	1.3
5	.32	1.0	.60	.00	.00	2.1	2.2	3.2	1.9	1.8	1.4	1.3
6	.30	1.1	.60	.00	.00	2.2	2.2	3.3	1.9	1.8	1.4	1.2
7	.30	1.2	.50	.00	.00	2.4	2.0	3.2	1.9	1.8	1.5	1.2
8	.30	1.2	.15	.00	.01	2.5	1.9	3.5	1.9	1.8	1.5	1.2
9	.28	1.1	.10	.00	.02	2.5	1.9	3.4	1.9	1.8	1.4	1.2
10	.28	1.1	.06	.00	.04	2.1	2.6	3.1	1.8	1.8	1.5	1.2
11	.32	1.1	.06	.00	.05	2.2	2.8	2.9	1.8	1.7	1.5	1.2
12	.36	1.0	.06	.00	.06	2.6	2.2	2.8	1.8	1.7	1.5	1.2
13	.40	1.0	.06	.00	.07	3.6	2.2	2.7	1.7	1.7	1.5	1.2
14	.42	1.0	.02	.00	.08	3.2	2.1	2.6	1.7	1.7	1.5	1.2
15	.42	.90	.00	.02	.10	3.4	2.2	2.5	1.8	1.7	1.5	1.2
16	.44	.90	.00	.02	.11	3.7	2.2	2.5	1.8	1.7	3.3	1.2
17	.46	.80	.00	.02	.12	3.5	2.2	2.4	1.8	1.7	1.6	1.1
18	.48	.70	.00	.02	.13	2.9	2.2	2.4	1.8	1.7	1.6	1.1
19	.50	.70	.00	.02	.14	2.8	2.4	2.4	1.8	1.7	1.8	1.2
20	.54	.70	.00	.02	.16	3.1	2.3	2.3	1.8	1.7	1.8	1.2
21	.60	.70	.00	.02	.17	3.3	2.3	2.2	1.8	20	1.4	1.2
22	.62	.70	.00	.02	.18	4.0	2.4	2.2	1.8	7.1	1.3	1.2
23	.64	.70	.00	.02	.35	2.9	2.5	2.2	1.7	1.6	1.3	1.2
24	.68	.70	.00	.01	.52	2.9	2.6	2.3	1.7	1.6	1.3	1.2
25	.73	.60	.00	.01	.69	2.9	2.5	2.3	1.7	1.7	1.3	1.2
26	.79	.60	.00	.01	.86	3.0	2.5	2.2	1.7	1.5	1.3	2.0
27	.76	.60	.00	.01	1.0	2.9	2.5	2.1	1.6	1.5	1.3	1.4
28	.76	.60	.00	.01	1.2	8.1	2.6	2.2	1.7	1.5	1.3	1.3
29	.79	.60	.00	.01	---	6.9	2.7	2.2	1.7	1.4	1.3	1.3
30	.85	.60	.00	.01	---	4.7	2.7	2.1	1.6	1.4	1.3	1.3
31	.91	---	.00	.01	---	6.1	---	2.0	---	1.4	1.3	---
TOTAL	15.37	25.75	4.61	.26	6.08	99.0	71.8	80.7	54.1	75.6	46.6	37.5
MEAN	.50	.86	.15	.008	.22	3.19	2.39	2.60	1.80	2.44	1.50	1.25
MAX	.91	1.2	.60	.02	1.2	8.1	3.6	3.5	2.0	20	3.3	2.0
MIN	.26	.60	.00	.00	.00	1.4	1.9	2.0	1.6	1.4	1.3	1.1
AC-FT	30	51	9.1	.5	12	196	142	160	107	150	92	74

CAL YR 1978 TOTAL 799.53 MEAN 2.19 MAX 500 MIN .00 AC-FT 1590
WTR YR 1979 TOTAL 517.37 MEAN 1.42 MAX 20 MIN .00 AC-FT 1030

09306255 YELLOW CREEK NEAR WHITE RIVER, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1974 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1975 to current year.
WATER TEMPERATURE: April 1975 to current year.
SUSPENDED-SEDIMENT DISCHARGE: April 1974 to current year.

INSTRUMENTATION.--Water-quality monitor since April 1975. Pumping sediment sampler since April 1974.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 5,790 micromhos Sept. 17, 1978; minimum, 457 micromhos July 21, 1979.
WATER TEMPERATURES: Maximum, 35.0°C July 25, 1978; minimum, freezing point on many days during winter months each year.
SEDIMENT CONCENTRATIONS: Maximum daily, 44,000 mg/L Sept. 7, 1978; minimum daily, no flow several days during September 1978, many days during 1979.
SEDIMENT LOADS: Maximum daily, 290,000 tons (263,000 t) Sept. 7, 1978; minimum daily, no flow several days during September 1978, many days during 1979.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum not determined; minimum, 457 micromhos July 21.
WATER TEMPERATURES: Maximum, 32.5°C Aug. 9; minimum, freezing point on many days during December and January.
SEDIMENT CONCENTRATIONS: Maximum daily, 8,460 mg/L Mar. 28; minimum daily, no flow on many days during year.
SEDIMENT LOADS: Maximum daily, 221 tons (200 t) Mar. 28; minimum daily, no flow on many days during year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM ADSORPTION RATIO
OCT 24...	1320	.25	4200	8.4	13.5	9.5	320	--	47	50	900	22
NOV 22...	0900	.70	4600	8.3	.5	14.2	700	--	100	110	1000	16
DEC 06...	0940	.60	4400	8.0	.5	10.8	520	--	28	110	990	19
JAN 24...	1515	.01	5200	8.5	.0	11.0	570	--	32	120	1200	22
FEB 23...	1000	.18	4500	8.8	.5	12.2	480	--	27	100	1000	20
MAR 28...	0940	12	1800	8.6	2.0	11.4	220	--	36	31	370	11
APR 24...	1300	2.2	4000	--	15.5	8.4	220	--	41	27	830	25
MAY 09...	1330	3.6	3800	8.7	10.5	8.4	570	570	46	110	650	12
JUN 27...	1540	E1.6	4100	8.7	29.5	6.5	440	440	12	100	880	18
JUL 17...	1000	E1.7	3650	8.5	27.5	8.5	460	0	19	100	830	17
AUG 16...	1555	16	3100	8.9	17.0	6.3	360	0	24	72	700	16
SEP 19...	1315	1.4	3200	8.7	21.0	9.2	410	0	27	82	700	15

E ESTIMATED.

09306255 YELLOW CREEK NEAR WHITE RIVER, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	POTASSIUM, DISSOLVED (MG/L AS K)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER DAY)	BORON, DISSOLVED (UG/L AS B)	CARBON, ORGANIC DISSOLVED (MG/L AS C)
OCT 24...	5.5	--	--	550	210	2.5	10	--	--	--	--
NOV 22...	6.1	--	--	610	210	2.8	11	--	--	--	--
DEC 06...	7.1	--	--	110	180	2.9	11	--	--	--	--
JAN 24...	8.6	--	--	580	220	2.6	13	--	--	--	--
FEB 23...	5.5	--	--	380	100	2.9	10	--	--	--	--
MAR 28...	3.3	--	--	310	63	1.4	6.5	--	--	--	--
APR 24...	4.4	0	--	--	140	2.2	9.2	--	--	740	7.7
MAY 09...	4.3	--	--	600	110	1.7	10	--	--	--	--
JUN 27...	4.3	--	--	640	140	2.6	6.7	--	--	--	--
JUL 17...	4.3	--	1530	580	140	2.6	9.4	2610	--	810	13
AUG 16...	4.2	--	1220	480	120	2.1	7.2	2150	95.0	720	26
SEP 19...	2.1	--	1200	210	260	2.2	10	2030	7.67	650	6.6

DATE	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (NTU)	NITROGEN, DISSOLVED (MG/L AS N)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	SULFIDE TOTAL (MG/L AS S)	BROMIDE DISSOLVED (MG/L AS BR)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)
APR 24...	15	4.0	.45	32	2.1	--	K100	--	.3	.01
AUG 16...	280	1300	1.2	190	>7.0	--	--	--	.4	.46
SEP 19...	20	42	1.4	200	1.6	K500	210	.0	2.0	.79

DATE	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, DISSOLVED (UG/L AS BA)	BERYLLIUM, DISSOLVED (UG/L AS BE)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)
APR 24...	.01	.43	.09	--	10	6	6	0	0	10
AUG 16...	.00	.70	1.0	.00	20	6	0	--	1	0
SEP 19...	.00	.60	.06	.03	10	5	0	0	0	10

K BASED ON NON-IDEAL COLONY COUNT.

09306255 YELLOW CREEK NEAR WHITE RIVER, CO--Continued

DATE	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)
APR										
24...	1	0	0	140	30	.0	19	0	1	3600
AUG										
16...	3	80	3	130	20	.0	39	5	4	1900
SEP										
19...	1	20	0	130	20	.0	20	1	2	2600

DATE	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)	GROSS ALPHA, DIS- SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS- SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS- SOLVED (PCI/L AS SR/ YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/ YT-90)	RADIUM 226, DIS- SOLVED, RADON METHOD (PCI/L)	URANIUM DIS- SOLVED, EXTRAC- TION (UG/L)
APR										
24...	5.0	10	<51	14	<20	5.2	<18	4.3	.92	5.4
AUG										
16...	16	10	--	--	--	--	--	--	--	--
SEP										
19...	7.0	10	<31	3.6	<13	2.1	<13	1.9	.11	5.5

DATE	TIME	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)	PCB, TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR- DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)
APR									
24...	1300	.00	12	.10	.0	.00	.0	.00	.00
AUG									
16...	1555	.00	2	--	--	--	--	--	--
SEP									
19...	1315	.00	0	--	.0	.00	.0	.00	.00

DATE	DDT, TOTAL (UG/L)	DI- AZINON, TOTAL (UG/L)	DI- ELDRIN TOTAL (UG/L)	ENDO- SULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	ETHION, TOTAL (UG/L)	HEPTA- CHLOR, TOTAL (UG/L)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)
APR									
24...	.00	.00	.00	.00	.00	.00	.00	.00	.00
AUG									
16...	--	--	--	--	--	--	--	--	--
SEP									
19...	.00	.00	.00	.00	.00	.00	.00	.00	.00

DATE	METHYL PARA- THION, TOTAL (UG/L)	METHYL TRI- THION, TOTAL (UG/L)	PARA- THION, TOTAL (UG/L)	TOX- APHENE, TOTAL (UG/L)	TOTAL TRI- THION (UG/L)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	SILVEX, TOTAL (UG/L)
APR								
24...	.00	.00	.00	0	.00	.00	.00	.00
AUG								
16...	--	--	--	--	--	--	--	--
SEP								
19...	.00	.00	.00	0	.00	.00	.00	.00

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4140	---	4210	---	5100	---	---	3500	3700	3840	3450	3290
2	4140	---	4280	---	---	4800	---	3300	3700	3800	3450	3290
3	4110	4030	4490	---	---	5300	---	3700	3800	3950	3430	3500
4	4070	4080	4620	---	---	5500	---	4000	3800	3950	3440	3440
5	4130	4080	4540	---	---	5400	---	4400	3900	3950	3430	3090
6	4110	4200	4610	---	---	5200	---	4400	4050	3850	3440	3180
7	4090	4050	4460	---	5500	5600	---	3500	3900	3850	3430	3260
8	4100	4040	4620	---	5500	3600	---	---	3970	3800	3430	3250
9	4110	4440	---	---	5300	4100	---	3800	3860	3850	3470	3260
10	4170	4390	---	---	5500	4000	---	4000	3870	3800	3430	3170
11	4270	3920	---	---	5500	4200	---	---	3870	3700	3330	3150
12	4260	4160	---	---	5300	4300	---	---	3950	3700	3300	3040
13	4300	4430	4800	---	5900	2600	3660	3600	3950	3750	3280	3020
14	4340	4480	---	---	---	---	3800	---	3650	3600	3180	3040
15	4350	4480	---	---	4500	---	3870	3700	3650	3550	3140	3080
16	4370	4500	---	5900	4900	4000	3870	3700	3870	3650	2360	3080
17	4330	4500	---	---	5100	3400	3680	3500	3870	3600	3170	3100
18	4270	4510	---	---	5400	4000	3370	---	---	3600	3180	3080
19	4320	4500	---	5000	---	3200	3120	3300	3760	3650	3040	3140
20	4380	4480	---	---	5100	3700	3360	3160	3730	3600	2930	3130
21	4240	4490	---	---	---	3000	3600	3120	4180	2390	3120	3110
22	4250	4480	---	---	5100	2900	3200	3300	3780	2330	3190	3130
23	4200	4610	---	4500	4500	4100	3800	3250	3790	3240	3230	3110
24	4200	4590	---	4900	4900	3700	3650	3030	3800	3450	3250	3110
25	---	4410	---	5500	5200	3800	3600	3500	3800	3450	3250	3070
26	---	4280	---	---	---	4100	3600	3500	3750	3500	3270	2840
27	---	4400	---	---	---	3200	3500	3600	3780	3450	3290	3100
28	---	4660	---	---	---	1600	3820	3600	3880	3300	3290	---
29	---	4500	---	5100	---	2950	3400	3600	3860	3500	3300	---
30	---	4200	---	---	---	2890	3400	3700	3840	3450	3300	---
31	---	---	---	5100	---	2150	---	3500	---	3450	3250	---

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	20.0	4.0	---	---		.5	---	---	---	---	2.0	1.0
2	20.5	5.0	---	---		.5	---	---	---	---	3.5	1.5
3	20.0	7.0	15.0	2.0		.5	---	---	---	---	4.5	1.5
4	20.5	1.5	15.0	3.0		.5	---	---	---	---	3.0	1.0
5	20.0	2.0	11.0	1.0		.5	---	---	---	---	3.5	1.5
6	19.0	1.5	10.0	1.0		.5	---	---	---	---	5.0	2.0
7	20.0	2.0	13.0	1.0		.5	---	---	---	---	5.0	1.5
8	19.0	2.5	7.5	1.0		.0	---	---	---	---	4.5	2.0
9	21.0	4.0	---	---		---	---	---	---	---	5.0	1.5
10	20.5	3.5	4.0	1.0		---	---	---	---	---	5.0	1.5
11	20.5	4.5	2.0	1.0		---	---	---	---	---	5.0	1.5
12	21.0	5.5	2.5	1.0		---	---	---	---	---	4.5	1.5
13	18.5	4.0	2.5	1.0		---	---	---	---	---	2.5	.5
14	18.5	1.0	3.0	1.0		---	---	---	---	---	6.5	1.5
15	19.5	1.0	3.0	.5		---	---	---	---	---	6.0	2.0
16	16.0	1.0	3.0	.5		---	---	---	---	---	5.5	3.5
17	13.5	3.0	2.5	.5		---	---	---	---	---	7.5	4.0
18	19.0	7.0	---	---		---	---	---	---	---	9.0	2.5
19	19.0	3.0	1.0	.5		---	---	---	---	---	8.5	3.0
20	12.0	4.0	1.0	.5		---	---	---	---	---	12.5	3.0
21	12.0	8.0	1.0	.5		---	---	---	---	---	8.0	3.0
22	8.5	3.5	1.0	.5		---	---	---	---	---	7.5	1.5
23	15.5	.0	1.0	.5		---	---	---	1.5	.5	11.5	.5
24	15.5	.5	1.0	.5		---	.0	.0	1.5	1.0	13.5	1.0
25	---	---	.5	.5		---	.0	.0	1.5	1.0	12.5	1.5
26	---	---	.5	.5		---	---	---	1.5	1.0	14.0	2.0
27	---	---	.5	.5		---	---	---	1.5	1.0	9.5	5.0
28	---	---	.5	.5		---	---	---	1.0	1.0	6.5	2.0
29	---	---	.5	.5		---	.0	.0	---	---	7.0	3.5
30	---	---	.5	.5		---	---	---	---	---	9.5	4.0
31	---	---	---	---		---	---	---	---	---	9.0	2.5

09306255 YELLOW CREEK NEAR WHITE RIVER, CO--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	11.5	3.5	15.5	8.5	24.5	4.0	28.5	14.0	29.5	9.5	27.0	7.0
2	12.5	2.0	16.0	7.5	24.5	4.5	28.5	13.5	30.0	9.5	26.5	8.0
3	14.5	2.0	10.0	7.0	23.0	5.5	25.0	11.5	30.0	15.0	25.5	8.5
4	10.0	2.0	20.0	5.0	27.0	8.0	28.0	10.0	30.5	9.0	26.5	13.5
5	---	---	18.5	7.0	28.0	8.0	27.0	9.0	28.0	10.5	26.0	7.5
6	---	---	14.5	6.5	25.5	9.0	23.0	10.5	30.5	13.0	27.5	7.5
7	---	---	8.5	4.5	---	---	29.5	10.0	29.5	15.0	26.0	7.5
8	---	---	10.5	4.5	---	---	27.5	10.0	31.0	16.5	25.0	9.5
9	---	---	11.5	2.0	22.5	5.5	29.5	9.0	32.5	16.0	24.0	9.5
10	---	---	14.5	3.5	25.5	5.5	---	---	30.0	11.0	24.5	13.0
11	---	---	14.0	4.0	27.5	7.5	30.5	9.5	24.0	12.0	26.0	9.5
12	---	---	22.5	3.5	28.0	8.5	31.0	10.0	28.0	14.5	25.0	7.5
13	16.5	6.0	23.5	4.5	25.0	9.0	30.5	11.5	21.0	12.5	19.5	5.0
14	22.5	2.5	24.0	5.5	26.0	12.0	29.5	10.5	22.5	10.5	23.0	6.5
15	20.0	4.5	23.5	6.5	27.5	12.0	30.5	12.0	---	---	23.5	3.5
16	22.5	6.5	21.0	7.5	27.0	11.0	29.5	11.5	---	---	23.0	3.5
17	19.0	6.5	26.5	8.5	26.0	8.5	30.0	12.5	21.5	9.0	23.5	3.5
18	17.5	5.5	25.5	9.5	---	---	30.5	12.0	22.5	11.5	24.0	5.0
19	13.5	6.5	26.5	7.0	---	---	30.5	11.0	21.5	12.0	23.5	5.5
20	16.5	3.5	27.0	6.5	26.5	8.0	29.0	12.0	20.5	12.0	23.0	8.5
21	20.0	5.0	27.5	8.5	28.0	8.0	23.0	13.0	26.5	9.0	23.5	7.0
22	20.0	3.0	27.0	7.5	28.0	9.0	27.5	13.5	28.0	9.5	23.0	7.0
23	20.5	4.5	28.0	8.0	31.0	11.0	29.0	13.5	27.5	9.0	23.0	6.0
24	16.5	6.5	23.0	9.5	30.0	11.0	31.5	13.0	28.0	10.5	22.5	6.5
25	21.0	5.5	26.0	11.5	29.0	10.5	31.0	12.0	27.5	8.5	21.5	6.5
26	20.0	2.0	---	---	28.5	11.5	29.0	11.0	27.5	8.5	19.0	9.0
27	22.0	1.5	---	---	29.5	11.5	29.5	13.0	25.0	8.5	23.0	7.0
28	18.5	6.5	---	---	30.0	12.0	30.0	14.0	24.0	10.0	---	---
29	20.5	4.0	---	---	28.5	12.0	29.0	10.5	26.0	7.5	---	---
30	18.5	6.0	---	---	28.0	15.5	30.5	9.5	21.5	8.0	---	---
31	---	---	---	---	---	---	30.0	10.0	25.0	9.5	---	---

09306255 YELLOW CREEK NEAR WHITE RIVER, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	.28	88	.07	.94	38	.10	.60	96	.16
2	.26	50	.04	.94	34	.09	.60	---	.31
3	.28	58	.04	.97	---	.15	.60	94	.15
4	.30	32	.03	1.0	44	.12	.60	79	.13
5	.32	42	.04	1.0	32	.09	.60	66	.11
6	.30	15	.01	1.1	28	.08	.60	100	.16
7	.30	44	.04	1.2	46	.15	.50	---	.27
8	.30	68	.06	1.2	36	.12	.15	---	.08
9	.28	48	.04	1.1	62	.18	.10	---	.05
10	.28	40	.03	1.1	---	.59	.06	135	.02
11	.32	72	.06	1.1	145	.43	.06	---	.01
12	.36	36	.03	1.0	99	.27	.06	---	.01
13	.40	195	.21	1.0	98	.26	.06	52	.01
14	.42	58	.07	1.0	---	.51	.02	86	.00
15	.42	34	.04	.90	91	.22	.00	---	---
16	.44	---	.06	.90	67	.16	.00	---	---
17	.46	30	.04	.80	80	.17	.00	---	---
18	.48	58	.08	.70	167	.32	.00	---	---
19	.50	58	.08	.70	206	.39	.00	---	---
20	.54	8	.01	.70	101	.19	.00	---	---
21	.60	96	.16	.70	163	.31	.00	---	---
22	.62	54	.09	.70	121	.23	.00	---	---
23	.64	30	.05	.70	102	.19	.00	---	---
24	.68	60	.11	.70	101	.19	.00	---	---
25	.73	28	.06	.60	81	.13	.00	---	---
26	.79	50	.11	.60	86	.14	.00	---	---
27	.76	---	.21	.60	86	.14	.00	---	---
28	.76	72	.15	.60	116	.19	.00	---	---
29	.79	78	.17	.60	94	.15	.00	---	---
30	.85	62	.14	.60	87	.14	.00	---	---
31	.91	310	.76	---	---	---	.00	---	---
TOTAL	15.37	---	3.09	25.75	---	6.40	4.61	---	1.47

09306255 YELLOW CREEK NEAR WHITE RIVER, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JANUARY			FEBRUARY			MARCH	
1	.00	---	---	.01	16	.00	1.4	---	1.3
2	.00	---	---	.01	22	.00	1.5	422	1.7
3	.00	---	---	.00	---	.00	1.7	583	2.7
4	.00	---	---	.00	---	---	1.9	480	2.5
5	.00	---	---	.00	---	---	2.1	230	1.3
6	.00	---	---	.00	---	---	2.2	400	2.4
7	.00	---	---	.00	---	.00	2.4	320	2.1
8	.00	---	---	.01	28	.00	2.5	1990	13
9	.00	---	---	.02	20	.00	2.5	1020	6.9
10	.00	---	---	.04	38	.00	2.1	743	4.8
11	.00	---	---	.05	20	.00	2.2	762	5.7
12	.00	---	---	.06	93	.02	2.6	624	6.5
13	.00	---	---	.07	67	.01	3.6	1770	22
14	.00	---	.00	.08	---	.01	3.2	1520	15
15	.02	14	.00	.10	63	.02	3.4	2760	28
16	.02	---	.00	.11	56	.02	3.7	2180	24
17	.02	---	.00	.12	61	.02	3.5	1360	16
18	.02	---	.00	.13	101	.04	2.9	1300	11
19	.02	17	.00	.14	---	.03	2.8	1600	13
20	.02	31	.00	.16	68	.03	3.1	7980	71
21	.02	---	.00	.17	---	.04	3.3	1260	13
22	.02	52	.00	.18	107	.05	4.0	1350	17
23	.02	---	.00	.35	92	.09	2.9	425	3.7
24	.01	35	.00	.52	67	.09	2.9	462	3.6
25	.01	49	.00	.69	111	.21	2.9	392	3.1
26	.01	---	.00	.86	---	.46	3.0	402	3.1
27	.01	---	.00	1.0	---	.68	2.9	1260	9.5
28	.01	---	.00	1.2	---	.97	8.1	8460	221
29	.01	18	.00	---	---	---	6.9	2230	42
30	.01	---	.00	---	---	---	4.7	5840	74
31	.01	12	.00	---	---	---	6.1	6710	115
TOTAL	0.26	---	0.00	6.08	---	2.79	99.0	---	755.9

09306255 YELLOW CREEK NEAR WHITE RIVER, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	3.6	1670	16	2.8	400	3.0	2.0	55	.30
2	2.8	1140	9.1	2.8	568	4.3	2.0	80	.43
3	2.3	983	6.2	2.9	411	3.2	2.0	154	.83
4	2.2	789	4.6	3.0	705	5.7	2.0	31	.17
5	2.2	910	5.4	3.2	547	4.7	1.9	49	.25
6	2.2	1180	7.0	3.3	447	4.0	1.9	---	.21
7	2.0	1090	5.9	3.2	2600	22	1.9	33	.17
8	1.9	865	4.4	3.5	4330	41	1.9	55	.28
9	1.9	956	4.9	3.4	5400	57	1.9	26	.13
10	2.6	3540	26	3.1	1000	8.4	1.8	---	.12
11	2.8	4360	40	2.9	450	3.5	1.8	---	.12
12	2.2	1240	6.9	2.8	355	2.7	1.8	---	.12
13	2.2	483	2.5	2.7	320	2.3	1.7	28	.13
14	2.1	550	3.1	2.6	310	2.2	1.7	---	.11
15	2.2	470	2.8	2.5	280	1.9	1.8	25	.12
16	2.2	320	1.9	2.5	---	1.9	1.8	18	.09
17	2.2	447	2.7	2.4	330	2.1	1.8	---	.07
18	2.2	428	2.5	2.4	350	2.3	1.8	---	.07
19	2.4	399	2.6	2.4	420	2.7	1.8	22	.11
20	2.3	409	2.5	2.3	360	2.2	1.8	23	.11
21	2.3	399	2.5	2.2	340	2.0	1.8	9	.04
22	2.4	418	2.7	2.2	430	2.6	1.8	15	.07
23	2.5	399	2.7	2.2	330	2.0	1.7	12	.06
24	2.6	333	2.3	2.3	410	2.5	1.7	16	.07
25	2.5	399	2.7	2.3	1400	8.7	1.7	---	.09
26	2.5	427	2.9	2.2	190	1.1	1.7	---	.09
27	2.5	280	1.9	2.1	180	1.0	1.6	24	.10
28	2.6	285	2.0	2.2	170	1.0	1.7	24	.11
29	2.7	437	3.2	2.2	100	.59	1.7	14	.06
30	2.7	352	2.6	2.1	95	.54	1.6	---	.08
31	---	---	---	2.0	120	.65	---	---	---
TOTAL	71.8	---	182.5	80.7	---	199.78	54.1	---	4.71

09306255 YELLOW CREEK NEAR WHITE RIVER, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JULY			AUGUST			SEPTEMBER	
1	1.7	16	.07	1.5	---	.32	1.3	---	.12
2	1.8	6	.03	1.5	---	.32	1.2	---	.11
3	1.8	197	.96	1.5	55	.22	1.3	---	.12
4	1.8	10	.05	1.4	---	.19	1.3	35	.12
5	1.8	---	.05	1.4	---	.19	1.3	---	.12
6	1.8	15	.07	1.4	65	.25	1.2	---	.11
7	1.8	---	.07	1.5	79	.32	1.2	---	.13
8	1.8	20	.10	1.5	53	.21	1.2	---	.13
9	1.8	5	.02	1.4	40	.15	1.2	---	.13
10	1.6	23	.11	1.5	92	.37	1.2	40	.13
11	1.7	12	.06	1.5	124	.50	1.2	---	.13
12	1.7	209	.96	1.5	66	.27	1.2	---	.13
13	1.7	23	.11	1.5	60	.24	1.2	---	.13
14	1.7	---	.14	1.5	56	.23	1.2	---	.16
15	1.7	46	.21	1.5	44	.18	1.2	---	.16
16	1.7	---	---	3.3	7980	79	1.2	---	.19
17	1.7	109	.50	1.6	450	1.9	1.1	---	.17
18	1.7	19	.09	1.6	130	.56	1.1	---	.21
19	1.7	13	.06	1.8	---	11	1.2	73	.24
20	1.7	---	.05	1.8	---	7.0	1.2	---	.16
21	20	2130	115	1.4	140	.53	1.2	43	.14
22	7.1	---	47	1.3	---	.42	1.2	37	.12
23	1.6	---	.43	1.3	78	.27	1.2	39	.13
24	1.6	---	.43	1.3	---	.21	1.2	30	.10
25	1.7	105	.48	1.3	---	.21	1.2	26	.08
26	1.5	98	.40	1.3	40	.14	2.0	6610	42
27	1.5	80	.32	1.3	40	.14	1.4	135	.51
28	1.5	50	.20	1.3	35	.12	1.3	95	.33
29	1.4	70	.26	1.3	---	.12	1.3	190	.67
30	1.4	80	.30	1.3	---	.12	1.3	175	.61
31	1.4	---	.30	1.3	---	.12	---	---	---
TOTAL	75.6	---	168.83	46.6	---	105.82	37.5	---	47.59
YEAR	517.37		1478.88						

09306300 WHITE RIVER ABOVE RANGELY, CO

LOCATION.--Lat 40°06'26", long 108°42'44", in SW¼SE¼ sec.27, T.2 N., R.101 W., Rio Blanco County, Hydrologic Unit 14050007, on left bank 80 ft (24 m) upstream from Taylor Draw and 4.7 mi (7.6 km) east of Rangely.

DRAINAGE AREA.--2,773 mi² (7,182 km²), revised.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1972 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,270 ft (1,606 m), from topographic map.

REMARKS.--Records good except those for winter period or periods of doubtful gage-height record, which are poor. Diversions above station for irrigation of about 31,900 acres (129 km²).

AVERAGE DISCHARGE.--7 years, 651 ft³/s (18.44 m³/s), 471,600 acre-ft/yr (581 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,260 ft³/s (121 m³/s) June 9, 1975, gage height, 7.02 ft (2.140 m); maximum gage height, 8.68 ft (2.646 m) Jan. 19, 1977 (backwater from ice); minimum daily discharge, 62 ft³/s (1.76 m³/s) July 13, 14, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,800 ft³/s (79 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
May 30	1930	*3,570	101	6.59	2.009	June 16	2230	3,260	92.3	6.35	1.939
June 7	2200	3,050	86.4	6.14	1.871						

Minimum daily discharge, 267 ft³/s (7.56 m³/s) Sept. 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	416	421	360	370	370	510	659	736	2660	1900	491	458
2	412	426	350	360	370	510	509	818	2380	1960	458	436
3	408	426	341	360	380	520	446	1030	2330	1890	474	426
4	394	430	321	360	380	520	408	878	2400	1710	458	412
5	394	430	330	360	390	530	452	758	2470	1540	446	398
6	394	412	340	360	390	530	624	772	2600	1370	453	381
7	394	403	350	360	400	540	736	878	2800	1270	458	369
8	398	398	360	360	400	540	694	960	2900	1170	458	353
9	394	412	370	350	410	550	617	1020	2720	1060	480	353
10	394	412	380	350	410	550	659	908	2120	976	491	337
11	394	412	380	350	420	560	666	802	1870	878	509	337
12	390	436	380	350	420	560	610	750	1840	840	497	337
13	390	440	380	350	430	570	652	715	2080	765	485	333
14	385	435	380	350	430	570	722	729	2470	701	509	333
15	381	426	380	350	440	580	736	810	2880	666	515	329
16	394	412	380	350	440	580	701	985	3140	638	554	329
17	394	403	380	340	450	590	736	1100	3140	652	604	321
18	408	403	380	340	450	590	862	1330	2930	638	610	317
19	408	400	380	340	460	600	832	1730	2400	610	590	291
20	403	397	380	340	460	600	765	2030	2100	604	617	281
21	426	395	380	340	470	610	687	2280	1770	597	673	279
22	436	390	380	340	470	610	659	2500	1750	604	645	276
23	441	393	380	340	480	620	680	2500	1880	617	571	277
24	441	394	380	340	480	620	750	2640	1990	610	558	275
25	430	398	380	340	490	630	802	2920	2020	571	539	272
26	430	395	370	340	490	630	750	3080	2050	545	527	267
27	426	392	370	340	500	631	701	3150	2080	533	527	296
28	426	388	370	350	500	1160	687	3210	2150	545	521	282
29	426	361	370	350	---	1210	729	3340	2060	539	485	287
30	421	360	370	360	---	818	715	3440	1940	509	474	295
31	421	---	370	360	---	878	---	3200	---	491	453	---
TOTAL	12669	12200	11422	10850	12180	19517	20246	51999	69920	27999	16170	9937
MEAN	409	407	368	350	435	630	675	1677	2331	903	522	331
MAX	441	440	380	370	500	1210	862	3440	3140	1960	673	458
MIN	381	360	321	340	370	510	408	715	1750	491	446	267
AC-FT	25130	24200	22660	21520	24160	38710	40160	103100	138700	55540	32070	19710

CAL YR 1978 TOTAL 270143 MEAN 740 MAX 3740 MIN 277 AC-FT 535800
WTR YR 1979 TOTAL 275109 MEAN 754 MAX 3440 MIN 267 AC-FT 545700

09306300 WHITE RIVER ABOVE RANGELY, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1975 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM ADSORPTION RATIO
OCT 31...	1200	E420	725	8.4	6.5	11.6	260	90	68	22	55	1.5
NOV 30...	1530	E360	815	8.4	.5	12.4	280	94	73	24	65	1.7
DEC 26...	1400	E370	665	8.0	.0	11.4	270	100	71	22	52	1.4
JAN 26...	1300	E340	748	7.7	.0	9.6	290	92	76	24	71	1.8
MAR 27...	1330	600	950	8.3	6.0	12.2	310	130	83	26	100	2.5
APR 25...	1000	805	625	8.6	11.5	7.6	--	--	--	--	--	--
MAY 22...	0945	2430	360	8.6	13.0	8.3	160	41	41	13	18	.6
JUN 06...	1330	2580	350	8.7	16.0	8.1	150	31	40	11	17	.6
JUL 17...	1000	E660	600	8.0	19.5	8.2	230	55	58	20	39	1.1
AUG 16...	0845	535	800	7.9	17.0	7.7	290	84	68	29	63	1.6
SEP 19...	1010	294	760	8.1	14.0	7.4	270	98	64	26	63	1.7

DATE	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)
OCT 31...	1.7	200	4	170	130	38	.2	12	430	.58	525	.01
NOV 30...	1.7	230	0	190	150	45	.2	15	488	.66	603	.06
DEC 26...	1.9	200	0	160	150	39	.2	17	452	.61	464	.18
JAN 26...	1.9	240	0	200	180	47	.2	17	535	.73	494	.19
MAR 27...	3.7	220	0	180	270	38	.3	8.4	638	.87	1030	.40
APR 25...	2.0	180	0	150	140	22	.3	--	--	--	--	.30
MAY 22...	--	140	0	110	62	8.6	.2	13	--	.33	1570	.28
JUN 06...	1.4	130	5	120	52	7.5	.2	9.9	209	.28	1460	.21
JUL 17...	1.7	210	0	170	120	21	.3	16	380	.52	626	.04
AUG 16...	2.1	250	0	210	170	35	.3	15	506	.69	731	.00
SEP 19...	2.3	--	0	170	190	36	.3	13	498	.68	395	.00

E ESTIMATED.

09306300 WHITE RIVER ABOVE RANGELY, CO--Continued

DATE	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	BORON, DISSOLVED (UG/L AS B)	IRON, DISSOLVED (UG/L AS FE)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	PERIPHYTON BIOMASS ASH WEIGHT G/SQ M	PERIPHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M
OCT 31...	.01	3.7	3.7	3.7	.00	130	40	1.9	1.8	.000	.079
NOV 30...	.00	.48	.48	.54	.11	80	30	2.8	1.7	--	--
DEC 26...	.11	.32	.43	.61	.05	50	10	2.5	1.8	--	--
JAN 26...	.04	.10	.14	.33	.05	60	10	2.4	2.5	--	--
MAR 27...	.05	.88	.93	1.3	3.3	150	330	39	4.3	--	--
APR 25...	.03	1.7	1.7	2.0	.39	80	--	13	5.1	--	--
MAY 22...	.01	1.1	1.1	1.4	.25	40	20	19	6.3	--	--
JUN 06...	.03	.59	.62	.83	.25	30	190	10	5.9	.000	.160
JUL 17...	.05	.61	.66	.70	.04	30	30	--	12	11.1	12.9
AUG 16...	.08	.03	.11	.11	.04	80	40	7.6	3.5	59.7	65.5
SEP 19...	.00	.40	.40	.40	.00	70	20	--	5.5	31.7	33.2

DATE	TIME	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	BARIUM, DISSOLVED (UG/L AS BA)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BERYLLIUM, DISSOLVED (UG/L AS BE)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)
NOV 30...	1530	900	10	1	0	0	40	10	<1	0
JUN 06...	1330	5600	20	3	1	100	0	0	0	0
SEP 19...	1010	190	0	2	1	0	40	0	<1	0

DATE	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)
NOV 30...	<1	10	10	1	<3	3	0	5	0
JUN 06...	0	20	10	4	0	9	0	16	0
SEP 19...	<1	10	10	0	<3	2	1	2	0

09306300 WHITE RIVER ABOVE RANGELY, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	LITHIUM TOTAL RECOVERABLE (UG/L AS LI)	LITHIUM DISSOLVED (UG/L AS LI)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)
NOV									
30...	10	10	80	20	.0	.0	3	2	3
JUN									
06...	8	7	220	10	2.0	.5	0	0	12
SEP									
19...	20	20	10	3	.1	.0	0	<10	4

DATE	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	STRONTIUM, TOTAL RECOVERABLE (UG/L AS SR)	STRONTIUM, DISSOLVED (UG/L AS SR)	VANADIUM, DISSOLVED (UG/L AS V)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)	CYANIDE TOTAL (MG/L AS CN)
NOV									
30...	0	2	2	840	920	.8	20	5	.00
JUN									
06...	3	1	0	430	300	1.5	40	10	.00
SEP									
19...	2	1	1	790	910	2.0	0	<3	.00

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT				
17...	312	56	47	--
31...	316	34	29	--
NOV				
14...	426	114	131	--
30...	417	157	177	80
DEC				
21...	380	88	90	83
26...	E370	--	--	--
JAN				
23...	340	55	50	--
26...	E340	--	--	--
MAR				
27...	600	--	--	--
27...	624	7270	12200	93
APR				
04...	408	229	252	--
18...	862	3870	9010	--
25...	805	--	--	--
25...	780	1320	2780	--
MAY				
09...	1020	2540	7000	67
17...	1100	1910	5670	50
22...	2430	--	--	--
22...	2430	2380	15600	33
31...	3210	1430	12400	48

DATE	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
JUN				
06...	2580	--	--	--
06...	2580	960	6690	--
13...	1900	613	3150	--
20...	2150	540	3140	--
JUL				
03...	1790	284	1370	--
11...	900	125	304	--
17...	E660	--	--	--
17...	666	76	137	--
26...	532	188	270	--
AUG				
03...	463	116	145	--
09...	474	136	174	--
16...	535	--	--	--
16...	535	120	173	--
24...	577	163	254	--
28...	527	153	218	--
SEP				
11...	337	32	29	--
19...	294	--	--	--
19...	294	28	22	--
27...	277	296	221	--

E ESTIMATED.

09306500 WHITE RIVER NEAR WATSON, UT

LOCATION.--Lat 39°58'46", long 109°10'41", in SE¼SW¼NE¼ sec.2, T.10 S., R.24 E., Uintah County, UT, Hydrologic Unit 14050007, on right bank 350 ft (110 m) downstream from bridge on State Highway 45, 1 mi (2 km) downstream from Evacuation Creek, and 7 mi (11 km) north of Watson.

DRAINAGE AREA.--4,020 mi² (10,410 km²), approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1904 to October 1906 (no winter records), May to November 1918, April 1923 to Sept. 30, 1979 (discontinued). Monthly discharge only for some periods, published in WSP 1313. Published as "near Dragon" 1906 and "near Rangely, Colo." 1904-5, 1918.

GAGE.--Water-stage recorder. Datum of gage is 4,946.78 ft (1,507.799 m), National Geodetic Vertical Datum of 1929. See WSP 1733 for history of changes prior to Oct. 27, 1959.

REMARKS.--Records good except those for winter months, which are fair. Diversions for irrigation of about 31,900 acres (129 km²) above station. Records for the 1978 water year are also published herein.

AVERAGE DISCHARGE.--56 years (1923-79), 695 ft³/s (19.68 m³/s), 503,500 acre-ft/yr (621 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 8,160 ft³/s (231 m³/s) July 15, 1929; maximum gage height, 13.1 ft (3.99 m) Feb. 11, 1962, from floodmark in well (backwater from ice); minimum daily discharge, 11 ft³/s (0.31 m³/s) Dec. 6, 1972, result of freezeup.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,900 ft³/s (82.1 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
May 31	1500	*3,900	110	6.29	1.917	June 17	1600	3,490	98.8	5.88	1.792

Minimum daily discharge, 190 ft³/s (5.38 m³/s) Dec. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	174	328	311	320	320	369	540	898	2250	2480	433	260
2	161	320	328	300	320	361	600	878	2040	2340	429	264
3	174	307	311	261	320	356	700	848	2110	2140	438	266
4	170	307	315	214	320	349	660	916	2160	1990	419	261
5	161	307	333	236	320	361	590	1040	2270	1790	396	250
6	184	311	328	300	300	384	600	1050	2490	1590	399	233
7	426	421	303	330	300	448	570	990	2230	1450	384	216
8	320	333	259	320	300	456	540	896	2330	1320	374	1530
9	283	320	291	300	340	485	550	844	2340	1220	358	640
10	267	303	295	280	330	487	570	765	2520	1120	356	398
11	251	271	259	290	290	506	570	754	2950	1080	355	334
12	251	283	300	340	320	435	530	778	3390	1170	355	321
13	251	311	300	340	340	415	550	766	3460	1090	435	349
14	275	307	300	340	340	404	570	786	3410	993	431	348
15	267	295	300	280	340	374	570	986	3520	916	420	335
16	263	303	300	300	320	345	600	1520	3630	842	489	342
17	291	303	300	300	300	332	610	2080	3730	801	449	346
18	287	299	303	300	280	327	610	2500	3800	858	398	354
19	283	300	186	300	255	380	580	2020	3580	955	386	371
20	279	270	191	300	212	447	540	1610	3330	846	401	448
21	291	220	135	300	270	556	520	1580	3140	778	402	436
22	299	120	96	300	290	528	542	1840	3050	718	381	437
23	315	210	154	300	290	620	563	1970	3080	679	362	421
24	307	356	168	300	270	690	540	2290	3190	638	345	411
25	299	370	330	300	280	869	524	2680	3250	541	332	390
26	299	380	320	320	301	586	550	2650	3390	573	334	387
27	299	395	310	320	345	476	636	2330	3240	509	331	387
28	295	375	300	320	362	444	804	2370	2800	481	318	369
29	291	356	310	300	---	430	878	2110	2700	452	319	373
30	307	342	325	260	---	460	906	2020	2640	454	312	370
31	320	---	330	320	---	480	---	2160	---	449	278	---
TOTAL	8340	9323	8591	9291	8575	14160	18113	46925	88020	33363	11819	11847
MEAN	269	311	277	300	306	457	604	1514	2934	1076	381	395
MAX	426	421	333	340	362	869	906	2680	3800	2480	489	1530
MIN	161	120	96	214	212	327	520	754	2040	449	278	216
AC-FT	16540	18490	17040	18430	17010	28090	35930	93080	174600	66180	23440	23500

CAL YR 1977 TOTAL 107479 MEAN 294 MAX 602 MIN 13 AC-FT 213200
WTR YR 1978 TOTAL 268367 MEAN 735 MAX 3800 MIN 96 AC-FT 532300

09306500 WHITE RIVER NEAR WATSON, UT--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	375	376	487	350	270	295	894	828	3260	2020	453	441
2	374	378	400	320	270	295	656	875	2700	2090	433	418
3	370	378	190	320	270	300	517	1080	2470	2040	445	404
4	369	371	240	320	270	310	465	1070	2460	1910	431	385
5	364	376	300	340	270	320	446	950	2500	1690	406	375
6	359	367	400	340	270	330	560	894	2570	1530	403	363
7	360	366	485	330	270	340	740	995	2750	1410	417	349
8	365	366	410	320	270	340	758	1140	3060	1330	405	329
9	360	366	330	320	270	340	663	1250	3030	1240	415	319
10	360	383	350	310	270	340	656	1200	2500	1140	424	315
11	365	371	390	310	280	340	767	1080	2090	1060	428	298
12	360	410	420	310	280	340	686	996	1960	984	439	309
13	357	482	440	320	280	350	692	958	2050	931	423	313
14	356	495	410	330	280	350	733	931	2370	856	436	307
15	357	409	370	300	280	350	794	989	2840	755	440	303
16	360	394	420	300	290	355	748	1110	3220	737	458	312
17	362	373	380	290	290	370	746	1310	3350	716	511	302
18	369	372	420	290	290	380	825	1470	3210	716	550	301
19	374	365	440	300	290	400	853	1760	2920	675	543	283
20	368	407	400	310	290	420	840	2210	2520	672	569	266
21	399	403	380	310	300	450	750	2520	2100	633	606	256
22	447	413	430	310	320	460	715	2720	1900	635	617	251
23	408	430	410	300	310	510	703	2880	1970	652	558	252
24	419	432	390	300	295	590	761	2900	2080	678	524	253
25	404	401	410	300	280	690	838	3180	2150	621	519	250
26	393	427	400	300	280	766	852	3420	2200	563	498	391
27	400	405	390	300	290	816	785	3410	2190	532	483	309
28	381	419	410	290	290	928	757	3600	2260	518	505	274
29	385	352	400	280	---	1770	792	3680	2240	535	472	267
30	382	339	370	270	---	1100	827	3820	2100	508	454	276
31	374	---	360	270	---	971	---	3780	---	476	434	---
TOTAL	11676	11826	12052	9560	7915	15916	21819	59006	75000	30853	14739	9471
MEAN	377	394	389	308	283	513	727	1903	2500	995	474	316
MAX	447	495	487	350	320	1770	894	3820	3350	2090	617	441
MIN	356	339	190	270	270	295	446	828	1900	476	403	250
AC-FT	23160	23460	23910	18960	15700	31570	43280	117000	148800	61200	29180	18790

CAL YR 1978 TOTAL 277667 MEAN 761 MAX 3800 MIN 190 AC-FT 550800
WTR YR 1979 TOTAL 279803 MEAN 767 MAX 3820 MIN 190 AC-FT 555000

09306500 WHITE RIVER NEAR WATSON, UT--Continued
WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 1950 to September 1979 (discontinued).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: December 1950 to current year.
WATER TEMPERATURE: December 1950 to current year.

REMARKS.--Records for the 1978 water year are included this year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 4,450 micromhos Aug. 4, 1955; minimum daily, 266 micromhos June 1, 1976.
WATER TEMPERATURES: Maximum daily, 31.0°C Aug. 8, 1954; minimum daily, freezing point on many days during winter months each year.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum daily, 1,190 micromhos Apr. 2; minimum daily, 315 micromhos June 18.
WATER TEMPERATURES: Maximum daily, 22.5°C Sept. 10; minimum daily, freezing point on many days during winter months.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
OCT 27...	1100	295	840	--	10.0	10	85	9.5	20	320	130	79
JAN 25...	1330	277	830	E8.2	.5	4	25	11.4	29	300	110	73
APR 25...	1400	520	720	--	14.5	6	120	8.0	22	250	88	66
JUL 20...	1100	838	550	E8.3	22.0	9	110	7.4	44	220	69	60
SEP 04...	1330	255	700	E8.4	23.5	6	24	8.3	15	270	110	66

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	ALKALINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	BROMIDE DISSOLVED (MG/L AS BR)
OCT 27...	30	69	1.7	2.0	240	200	.2	210	46	.3	.1
JAN 25...	28	90	2.3	2.0	230	190	--	210	46	.3	--
APR 25...	21	46	1.3	1.8	200	160	.1	130	29	.2	.1
JUL 20...	18	29	.8	1.9	190	160	--	99	19	.2	--
SEP 04...	25	51	1.4	1.9	190	160	.0	160	38	.2	.3

DATE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)	NITROGEN, NITRATE DISSOLVED (MG/L AS N)	NITROGEN, NITRITE DISSOLVED (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)
OCT 27...	13	558	560	569	.76	444	230	.01	.00	.01	.02
JAN 25...	14	536	--	578	.73	401	--	.08	.01	.09	.02
APR 25...	11	420	430	405	.57	590	280	.06	.00	.06	.00
JUL 20...	18	337	--	340	.46	762	--	.03	.00	.03	.01
SEP 04...	12	472	--	449	.64	325	21	.01	.00	.01	.02

E ESTIMATED.

09306500 WHITE RIVER NEAR WATSON, UT--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)
OCT 27...	.53	.11	.00	20	2	0	70	0	5	2	10
JAN 25...	.12	.07	.00	20	--	--	80	--	--	--	40
APR 25...	.65	.23	.00	0	1	0	50	0	0	0	50
JUL 20...	.76	.18	.01	120	--	--	50	--	--	--	210
SEP 04...	.45	.03	.01	30	2	100	60	0	10	2	20

DATE	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)	GROSS ALPHA, DIS-SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)
OCT 27...	0	20	20	.0	1	0	1000	1.8	8	7.4	12
JAN 25...	--	10	0	--	--	--	1000	--	--	--	--
APR 25...	0	8	0	.0	0	1	760	2.0	10	<4.9	17
JUL 20...	--	10	20	--	--	--	530	--	--	--	--
SEP 04...	5	20	0	.0	2	0	800	.3	10	7.4	1.5

DATE	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS-SOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)	CARBON, INOR-GANIC, TOTAL (MG/L AS C)	PHENOLS (UG/L)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	CHLORO-PHYLL A PHYTO-PLANK-TON, UNCORR. (UG/L)	CHLORO-PHYLL B PHYTO-PLANK-TON, UNCORR. (UG/L)
OCT 27...	2.8	7.7	2.5	6.8	3.4	1.0	49	2	.10	.342	.000
JAN 25...	--	--	--	--	--	--	46	--	--	.888	.104
APR 25...	<1.5	11	<1.3	10	2.9	2.1	43	4	.00	--	--
JUL 20...	--	--	--	--	--	--	--	--	--	--	--
SEP 04...	<2.5	1.0	<2.3	1.0	5.8	.8	40	2	.10	--	--

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
NOV 23...	1330	209	878	495
DEC 14...	1230	264	456	325
JAN 25...	1430	277	243	182
MAR 07...	1415	443	2350	2810
APR 25...	1400	520	754	1060
JUN 16...	1530	3670	2100	20800
JUL 03...	1115	2270	1260	7720
20...	1300	830	339	760
AUG 24...	1930	344	138	128
SEP 07...	1100	214	32	18

09306500 WHITE RIVER NEAR WATSON, UT--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)
OCT 11...	1630	385	710	8.4	15.0	9.4	260	110	69	22
NOV 28...	1530	391	670	8.3	.5	11.6	260	--	66	22
FEB 01...	1500	222	730	7.4	.0	8.1	290	130	76	24
MAR 30...	--	1120	950	8.1	3.5	9.0	320	170	85	26
APR 26...	1430	798	800	8.0	15.0	7.9	240	79	56	24
MAY 24...	1700	2800	406	7.2	14.0	7.4	160	40	39	15
JUN 06...	1600	2580	360	8.3	18.0	--	160	48	40	14
SEP 27...	1400	274	810	8.0	18.0	7.1	260	94	71	21

DATE	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)
OCT 11...	51	1.4	1.8	180	3	150	170	35	.3	14
NOV 28...	55	1.5	1.7	--	--	170	150	37	.2	13
FEB 01...	62	1.6	1.7	--	--	160	220	44	.2	17
MAR 30...	110	2.7	3.6	--	--	150	330	35	.3	6.6
APR 26...	52	1.5	2.3	--	--	160	160	27	.3	15
MAY 24...	28	1.0	2.1	--	--	120	82	7.5	.2	9.7
JUN 06...	21	.7	1.4	--	--	110	65	7.8	.2	10
SEP 27...	74	2.0	5.4	--	--	170	210	40	.4	9.2

09306500 WHITE RIVER NEAR WATSON, UT--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	ALUMINUM, DISSOLVED (UG/L AS AL)	BORON, DISSOLVED (UG/L AS B)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)	STRONTIUM, DISSOLVED (UG/L AS SR)
OCT 11...	455	.62	473	.02	--	--	70	--	--	--
NOV 28...	--	--	--	.03	.02	--	70	--	--	--
FEB 01...	543	.74	325	.26	--	--	70	--	--	870
MAR 30...	692	.94	2090	1.2	.02	--	150	--	--	--
APR 26...	435	.59	937	.41	.02	--	100	--	--	--
MAY 24...	258	.35	1950	.38	--	--	50	--	--	470
JUN 06...	226	.31	1570	--	--	20	50	40	0	360
SEP 27...	536	.73	397	.52	--	--	110	--	--	--

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)
OCT 11...	1600	365	66	65
FEB 01...	1415	222	37	22
JUN 06...	1600	2580	2700	18800

09306500 WHITE RIVER NEAR WATSON, UT--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	890	780	---	550	---	---	---	700
2	---	860	830	---	---	---	---	550	345	---	620	---
3	920	---	---	800	---	800	780	---	---	345	---	---
4	---	790	---	---	---	---	---	---	---	---	630	---
5	940	---	830	---	---	---	790	510	375	345	375	---
6	---	---	---	840	770	840	---	---	---	---	---	---
7	910	760	800	---	---	---	840	---	370	380	650	---
8	---	---	---	---	770	860	---	570	---	---	---	---
9	---	810	810	750	---	---	---	---	360	---	660	---
10	970	---	---	---	770	910	800	630	---	425	---	---
11	---	790	---	780	---	---	---	---	---	---	650	870
12	870	---	770	---	---	---	730	610	370	720	---	---
13	---	---	---	780	790	1020	---	---	---	---	---	800
14	880	800	770	---	---	---	740	---	320	475	720	---
15	---	---	---	---	820	1020	---	550	---	---	---	---
16	---	810	800	790	---	---	---	---	310	---	740	---
17	840	---	---	---	850	990	700	490	---	---	---	---
18	---	790	---	790	---	---	---	---	---	---	690	740
19	820	---	770	---	---	---	660	390	295	---	---	---
20	---	---	---	780	820	960	---	---	---	---	---	740
21	840	880	860	---	---	---	680	---	285	---	690	---
22	---	---	---	---	880	900	---	410	---	---	---	700
23	---	730	980	790	---	---	---	---	290	---	680	---
24	---	---	---	---	800	930	660	380	---	---	---	---
25	---	---	---	800	---	---	---	---	---	---	710	700
26	840	---	---	---	---	---	670	350	285	560	---	---
27	---	---	830	860	760	1040	---	---	---	---	---	690
28	840	810	790	---	---	---	600	---	290	580	---	---
29	---	---	---	---	---	990	---	---	---	---	---	700
30	---	860	790	830	---	---	---	---	305	---	700	---
31	840	---	---	---	---	---	---	345	---	---	---	---

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	.5	5.0	---	5.0	---	---	---	17.5
2	---	7.0	.0	---	---	---	---	6.5	13.5	---	24.5	---
3	11.0	---	---	.5	---	5.0	5.5	---	---	17.5	---	---
4	---	9.0	---	---	---	---	---	---	---	---	21.0	---
5	15.5	---	.5	---	---	---	7.0	7.0	14.5	17.5	---	---
6	---	---	---	.5	.5	1.0	---	---	---	---	---	23.5
7	15.5	8.5	.5	---	---	---	7.0	---	14.5	17.5	24.5	---
8	---	---	---	---	.5	1.0	---	10.0	---	---	---	19.0
9	---	4.0	.5	.5	---	---	---	---	14.5	---	24.5	---
10	11.5	---	---	---	.5	1.0	7.5	13.5	---	17.5	---	---
11	---	3.5	---	.5	---	---	---	---	---	---	23.5	16.5
12	10.0	---	.5	---	---	---	9.0	11.0	15.5	16.5	---	---
13	---	---	---	.5	.5	1.0	---	---	---	---	---	15.5
14	10.0	4.5	.5	---	---	---	7.5	---	15.5	20.5	20.0	---
15	---	---	---	---	.5	1.0	---	16.5	---	---	---	---
16	---	5.0	.5	.5	---	---	---	---	15.5	---	20.0	---
17	13.0	---	---	---	.5	1.5	6.5	13.5	---	---	---	---
18	---	3.5	---	.5	---	---	---	---	---	---	16.5	13.5
19	14.5	---	.5	---	---	---	6.5	11.0	15.5	---	---	---
20	---	---	---	.5	.5	3.0	---	---	---	---	---	10.0
21	11.0	.0	.5	---	---	---	5.5	---	15.5	---	21.0	---
22	---	---	---	---	.5	3.0	---	14.5	---	---	---	14.5
23	---	.0	.5	.5	---	---	---	---	16.5	---	22.0	---
24	---	---	---	---	.5	1.5	7.0	12.5	---	---	---	---
25	---	---	---	.5	---	---	---	---	---	---	17.5	17.5
26	11.0	---	---	---	---	---	7.0	11.0	16.5	24.5	---	---
27	---	---	.5	.5	.5	3.0	---	---	---	---	---	17.5
28	10.0	1.5	.5	---	---	---	7.0	---	16.5	23.0	---	---
29	---	---	---	---	---	4.5	---	---	---	---	---	15.5
30	---	.5	.5	.5	---	---	---	---	17.5	---	21.0	---
31	7.0	---	---	---	---	---	---	14.5	---	---	---	---

09306500 WHITE RIVER NEAR WATSON, UT--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	700					---	---	390	---	700	---
2	690	---					1190	660	---	405	---	---
3	---	700					---	---	---	---	---	---
4	680	---					1080	710	415	---	---	---
5	---	---					---	---	---	---	---	740
6	690	700					1100	---	395	420	760	740
7	---	---					---	650	---	---	---	---
8	---	730					---	---	350	---	750	---
9	680	---					880	610	---	470	---	---
10	---	720					---	---	---	---	---	730
11	690	---					920	720	420	490	780	---
12	---	---					---	---	---	---	---	770
13	700	700					920	---	430	520	750	---
14	---	---					---	760	---	---	---	770
15	---	770					---	---	340	---	790	---
16	680	---					900	680	---	570	---	---
17	---	740					---	---	---	---	760	760
18	690	---					890	580	315	590	---	---
19	---	---					---	---	---	---	---	780
20	680	740					800	---	340	610	780	---
21	---	---					---	495	---	---	---	780
22	---	740					---	---	410	---	760	---
23	---	---					790	465	---	680	---	---
24	---	730					---	---	---	---	730	820
25	660	---					740	430	---	660	---	---
26	---	---					---	---	---	---	---	810
27	680	710					670	---	355	680	710	---
28	---	---					---	---	---	---	---	---
29	---	730					---	---	350	---	720	900
30	700	---					660	385	---	700	---	---
31	---	---					---	---	---	---	700	---

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	9.0					---	---	12.0	---	19.5	---
2	18.0	---					1.5	11.0	---	18.0	---	---
3	---	10.0					---	---	---	---	---	---
4	13.5	---					4.5	10.0	15.5	---	---	---
5	---	---					---	---	---	---	---	21.0
6	10.0	8.5					10.0	---	16.5	17.5	18.5	20.0
7	---	---					---	8.0	---	---	---	---
8	---	6.5					---	---	12.0	---	20.0	---
9	13.5	---					10.0	8.0	---	20.0	---	---
10	---	4.5					---	---	---	---	---	22.5
11	14.5	---					4.5	10.0	15.5	20.0	15.0	---
12	---	---					---	---	---	---	---	20.0
13	11.0	.0					6.5	---	18.0	20.0	21.0	---
14	---	---					---	15.5	---	---	---	17.5
15	---	1.0					---	---	16.5	---	21.0	---
16	11.0	---					13.5	15.5	---	20.5	---	---
17	---	.0					---	---	---	---	21.0	19.0
18	11.0	---					13.5	15.5	13.5	20.5	---	---
19	---	---					---	---	---	---	---	19.0
20	10.0	.0					10.0	---	13.5	20.0	16.5	---
21	---	---					---	15.5	---	---	---	17.5
22	---	.0					---	---	16.5	---	20.5	---
23	---	---					12.0	15.5	---	19.5	---	---
24	---	.0					---	---	---	---	21.5	19.5
25	9.0	---					13.5	14.5	18.5	20.0	---	---
26	---	---					---	---	---	---	---	15.5
27	6.5	.0					13.5	---	19.0	20.0	21.5	---
28	---	---					---	---	---	---	---	---
29	---	.0					---	---	20.0	---	21.0	18.0
30	9.0	---					13.5	12.0	---	20.5	---	---
31	---	---					---	---	---	---	20.5	---

09339900 EAST FORK SAN JUAN RIVER ABOVE SAND CREEK, NEAR PAGOSA SPRINGS, CO

LOCATION.--Lat 37°23'25", long 106°50'25", Archuleta County, Hydrologic Unit 14080101, on right bank 0.3 mi (0.5 km) upstream from Sand Creek, 4.0 mi (6.4 km) upstream from West Fork San Juan River, and 13 mi (21 km) northeast of Pagosa Springs.

DRAINAGE AREA.--64.1 mi² (166.0 km²).

PERIOD OF RECORD.--October 1956 to current year. Prior to October 1959, published as San Juan River above Sand Creek, near Pagosa Springs.

REVISED RECORDS.--WSP 1713: 1957.

GAGE.--Water-stage recorder. Altitude of gage is 8,900 ft (2,713 m), from topographic map.

REMARKS.--Records good except those for winter period, which are poor. Diversions above station for irrigation of about 500 acres (2.0 km²) of hay meadows above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--23 years, 84.9 ft³/s (2.404 m³/s), 61,510 acre-ft/yr (75.8 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,260 ft³/s (64.0 m³/s) Sept. 14, 1970, gage height, 6.75 ft (2.057 m), from rating curve extended above 460 ft³/s (13 m³/s), on basis of slope-area measurement at gage height 6.13 ft (1.868 m); minimum daily determined, 3.4 ft³/s (0.096 m³/s) Dec. 26, 1958.

EXTREMES OUTSIDE PERIOD OF RECORD.--Greatest flood since at least 1885 occurred Oct. 5, 1911.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 500 ft³/s (14 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
May 28	1230	*1,190	33.7	5.66	1.725	June 16	1930	1,090	30.9	5.50	1.675
June 6	2200	1,120	31.7	5.55	1.692	June 30	2300	746	21.1	4.95	1.509

Minimum daily discharge, 6.0 ft³/s (0.17 m³/s) Dec. 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	12	12	7.5	9.0	9.0	17	190	668	680	96	32
2	11	12	10	7.5	9.0	9.5	17	214	590	608	91	30
3	10	20	7.5	7.0	9.5	9.5	16	187	698	560	78	29
4	10	15	6.5	7.5	9.0	9.0	16	178	734	495	74	28
5	10	14	10	8.0	8.5	8.5	16	222	752	430	70	26
6	9.8	14	7.5	8.5	8.0	9.5	18	294	933	425	57	26
7	10	13	7.0	9.0	8.0	11	25	290	1020	415	70	25
8	9.8	13	6.5	9.0	8.0	12	32	246	933	440	81	24
9	9.8	13	6.5	9.0	7.5	14	37	187	722	405	71	24
10	9.8	13	6.5	9.5	7.5	15	36	145	530	370	55	26
11	9.1	18	6.5	9.0	8.0	15	32	122	505	355	75	23
12	9.1	20	6.5	9.0	8.5	16	29	107	620	330	80	22
13	9.1	15	7.0	9.5	8.5	18	28	115	776	320	72	22
14	8.8	14	7.0	9.0	8.5	20	29	150	926	320	70	24
15	8.4	13	6.5	9.0	9.0	20	40	206	933	315	96	24
16	8.4	13	6.0	9.0	9.5	20	68	234	905	302	117	22
17	8.4	12	6.5	9.0	10	20	105	258	728	294	91	20
18	8.4	12	7.5	9.0	10	19	140	360	674	266	75	19
19	8.4	12	8.0	9.0	10	18	158	638	545	222	53	18
20	8.4	10	8.5	8.5	11	18	150	680	445	187	58	18
21	10	11	8.0	8.5	10	17	150	626	470	172	52	18
22	13	13	8.5	9.0	9.5	16	181	614	540	181	48	18
23	12	12	8.5	9.5	9.5	16	234	530	638	172	45	17
24	14	13	8.0	9.0	9.5	16	246	535	644	160	41	16
25	15	15	8.0	9.5	9.0	16	222	475	656	155	40	16
26	13	14	8.0	9.5	9.0	18	190	698	650	142	40	16
27	13	14	8.0	9.5	9.5	19	175	638	650	131	40	16
28	13	13	8.0	9.5	9.5	19	190	905	674	133	37	16
29	12	12	8.0	9.0	---	19	210	856	662	142	35	15
30	12	12	8.0	9.0	---	18	184	954	656	124	35	15
31	12	---	8.0	9.0	---	18	---	770	---	107	34	---
TOTAL	326.7	407	239.0	273.5	252.5	483.0	2991	12624	20877	9358	2007	647
MEAN	10.5	13.6	7.71	8.82	9.02	15.6	99.7	407	696	302	64.7	21.6
MAX	15	20	12	9.5	11	20	246	954	1020	680	117	32
MIN	8.4	10	6.0	7.0	7.5	8.5	16	107	445	107	34	15
AC-FT	648	807	474	542	501	958	5930	25040	41410	18560	3980	1280

CAL YR 1978 TOTAL 27532.9 MEAN 75.4 MAX 550 MIN 6.0 AC-FT 54610
WTR YR 1979 TOTAL 50485.7 MEAN 138 MAX 1020 MIN 6.0 AC-FT 100100

NOTE.--NO GAGE-HEIGHT RECORD DEC. 3 TO MAR. 15.

09340000 EAST FORK SAN JUAN RIVER NEAR PAGOSA SPRINGS, CO

LOCATION.--Lat 37°22'10", long 106°53'30", in NW¼SW¼ sec.7, T.36 N., R.1 E., Archuleta County, Hydrologic Unit 14080101, on right bank 0.2 mi (0.3 km) upstream from private highway bridge, 0.5 mi (0.8 km) upstream from West Fork, and 9.5 mi (15.3 km) northeast of Pagosa Springs.

DRAINAGE AREA.--86.9 mi² (225.1 km²).

PERIOD OF RECORD.--May 1935 to current year. Prior to October 1959, published as San Juan River near Pagosa Springs.

GAGE.--Water-stage recorder. Datum of gage is 7,597.63 ft (2,315.758 m), National Geodetic Vertical Datum of 1929. Prior to Sept. 8, 1938, at site 0.2 mi (0.3 km) downstream at different datum.

REMARKS.--Records good except those for winter period, which are poor. Diversions above station for irrigation of about 500 acres (2.0 km²) of hay meadows above station and a few small hay meadows below station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--44 years, 119 ft³/s (3.370 m³/s), 86,220 acre-ft/yr (106 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,460 ft³/s (69.7 m³/s) Sept. 14, 1970, gage height, 4.85 ft (1.478 m); maximum gage height, 5.08 ft (1.548 m) Sept. 6, 1970; minimum daily discharge, 5.5 ft³/s (0.16 m³/s) Dec. 20, 1939.

EXTREMES OUTSIDE PERIOD OF RECORD.--Greatest flood since at least 1885 occurred Oct. 5, 1911.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 600 ft³/s (17 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
May 6	2300	783	22.2	3.62	1.103	June 15	2130	1,330	37.7	4.18	1.274
May 26	2400	*1,490	42.2	4.48	1.366	June 27	2300	874	24.8	3.65	1.113
June 7	0200	1,480	41.9	4.39	1.338						

Minimum daily discharge, 10 ft³/s (0.28 m³/s) Dec. 9-11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	20	18	13	16	17	36	422	818	727	115	40
2	16	20	15	13	16	18	35	475	727	678	105	38
3	16	34	13	13	17	18	33	408	951	618	99	36
4	16	29	12	13	17	17	33	386	1100	535	95	35
5	15	27	11	13	15	16	35	495	1120	480	99	34
6	15	23	16	14	15	17	46	648	1280	475	87	32
7	15	21	12	15	15	18	69	684	1210	465	91	31
8	15	20	11	15	15	20	95	552	1110	465	99	29
9	14	19	10	16	14	24	109	404	979	436	89	29
10	14	19	10	17	14	26	91	318	734	418	81	31
11	14	28	10	16	14	28	74	269	708	408	95	28
12	14	32	11	16	15	26	66	251	867	386	107	28
13	14	28	11	17	15	32	62	269	1080	372	95	28
14	14	24	12	16	16	38	71	364	1190	364	85	30
15	14	22	12	16	17	43	109	495	1220	359	131	30
16	14	21	11	16	17	38	173	582	1160	346	150	27
17	14	20	11	16	18	35	234	654	1030	328	113	26
18	14	22	11	16	18	33	297	853	839	293	95	24
19	14	19	11	16	18	32	328	1040	678	248	83	22
20	14	19	11	16	19	31	289	1100	558	221	76	24
21	15	20	13	15	19	30	289	1120	582	206	71	23
22	26	21	14	15	18	28	350	1200	660	212	56	24
23	24	19	14	17	17	28	455	1190	762	203	58	23
24	35	20	15	16	17	28	490	1170	769	191	56	22
25	33	23	14	17	17	30	465	1150	790	185	54	21
26	27	24	13	17	17	36	400	1350	755	173	54	20
27	24	24	13	17	17	42	372	1290	752	158	56	20
28	23	22	13	17	18	39	418	1210	776	158	52	20
29	21	18	13	16	---	38	465	1130	748	165	47	20
30	20	19	14	16	---	37	404	1110	741	145	47	18
31	20	---	14	16	---	37	---	888	---	125	46	---
TOTAL	561	677	389	482	461	897	6393	23477	26674	10543	2587	813
MEAN	18.1	22.6	12.5	15.5	16.5	28.9	213	757	889	340	83.5	27.1
MAX	35	34	18	17	19	42	490	1350	1280	727	150	40
MIN	14	18	10	13	14	16	33	251	558	125	46	18
AC-FT	1110	1340	772	956	914	1780	12680	46570	52910	20910	5130	1610

CAL YR 1978 TOTAL 36974 MEAN 101 MAX 642 MIN 10 AC-FT 73340
WTR YR 1979 TOTAL 73954 MEAN 203 MAX 1350 MIN 10 AC-FT 146700

09342500 SAN JUAN RIVER AT PAGOSA SPRINGS, CO

LOCATION.--Lat 37°15'58", long 107°00'37", in NE¼SW¼ sec.13, T.35 N., R.2 W., Archuleta County, Hydrologic Unit 14080101, on right bank at former bridge site in Pagosa Springs, 0.2 mi (0.3 km) upstream from McCabe Creek, 0.6 mi (1.0 km) downstream from bridge on U.S. Highway 160, and 2.0 mi (3.2 km) upstream from Mill Creek.

DRAINAGE AREA.--298 mi² (772 km²).

PERIOD OF RECORD.--October 1910 to December 1914, May 1935 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1313: 1914(M).

GAGE.--Water-stage recorder. Datum of gage is 7,052.04 ft (2,149.462 m), National Geodetic Vertical Datum of 1929. Jan. 29 to Mar. 6, 1911, nonrecording gage at site 0.5 mi (0.8 km) upstream at different datum. Mar. 7 to Oct. 4, 1911, nonrecording gage at present site at different datum. Nov. 23, 1911, to Nov. 14, 1914, nonrecording gage at site 300 ft (91 m) downstream at different datum.

REMARKS.--Records good. Diversions for irrigation of large areas above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--48 years, 367 ft³/s (10.39 m³/s), 265,900 acre-ft/yr (328 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 25,000 ft³/s (708 m³/s) Oct. 5, 1911, gage height, 17.8 ft (5.43 m), from floodmarks, from velocity-area study; minimum daily, 9.7 ft³/s (0.27 m³/s) Oct. 5, 6, 1956.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known since at least 1885, that of Oct. 5, 1911. Flood of June 29, 1927, reached a stage of 13.5 ft (4.11 m), discharge about 15,000 ft³/s (453 m³/s), from information by local residents.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,500 ft³/s (42 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
May 6	2200	2,250	63.7	5.25	1.600	June 7	0400	4,520	128	7.05	2.149
May 26	2200	*5,210	148	7.48	2.280	June 16	0030	4,410	125	6.98	2.128

Minimum daily discharge, 23 ft³/s (0.65 m³/s) Oct. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41	56	61	48	57	61	132	1400	2780	3020	424	143
2	40	55	61	46	58	64	114	1510	2490	2710	392	132
3	39	85	45	44	60	64	114	1340	3080	2510	352	128
4	38	88	38	44	60	60	106	1270	3090	2180	328	120
5	32	82	60	48	53	57	126	1510	3210	1940	304	114
6	26	74	47	50	52	61	198	1800	3740	1940	236	108
7	26	68	40	55	53	66	332	2020	4040	1960	252	105
8	25	65	38	55	51	78	460	1680	3700	2030	276	105
9	25	65	38	60	50	94	500	1300	2960	1910	276	101
10	25	65	38	61	51	101	424	1040	2280	1800	247	92
11	25	85	38	57	51	97	328	882	2230	1720	253	78
12	26	140	40	58	53	108	262	798	2690	1620	390	55
13	26	103	42	60	55	126	235	822	3360	1540	304	53
14	26	95	42	56	56	136	308	1050	3840	1510	292	60
15	25	85	40	57	60	136	540	1360	3870	1450	418	70
16	25	78	38	57	62	145	840	1540	3850	1340	720	62
17	24	76	38	56	64	140	1150	1600	3360	1280	520	58
18	24	71	40	57	65	128	1370	1890	2880	1190	444	56
19	24	70	50	57	65	118	1430	2600	2330	1010	398	51
20	23	70	50	56	68	114	1240	3040	2050	994	340	51
21	25	70	50	52	68	110	1240	3000	2190	945	293	56
22	55	78	50	57	64	103	1440	3490	2460	903	241	61
23	70	72	55	62	62	101	1650	3460	2760	828	219	58
24	72	72	50	56	62	112	1700	3430	2820	750	233	57
25	106	105	50	60	60	132	1600	3360	2780	714	182	52
26	76	83	48	61	60	158	1440	4150	2840	672	175	51
27	64	78	48	62	64	175	1370	4220	2970	605	172	47
28	60	64	48	62	62	156	1500	3910	3040	575	153	48
29	57	68	50	58	---	156	1600	3740	2950	640	154	47
30	56	71	50	58	---	143	1390	3660	2960	585	151	46
31	56	---	50	58	---	154	---	3030	---	465	156	---
TOTAL	1262	2337	1433	1728	1646	3454	25139	69902	89600	43336	9335	2265
MEAN	40.7	77.9	46.2	55.7	58.8	111	838	2255	2987	1398	301	75.5
MAX	106	140	61	62	68	175	1700	4220	4040	3020	720	143
MIN	23	55	38	44	50	57	106	798	2050	465	151	46
AC-FT	2500	4640	2840	3430	3260	6850	49860	138700	177700	85960	18520	4490

CAL YR 1978 TOTAL 116662 MEAN 320 MAX 2250 MIN 14 AC-FT 231400
WTR YR 1979 TOTAL 251437 MEAN 689 MAX 4220 MIN 23 AC-FT 498700

09343300 RIO BLANCO BELOW BLANCO DIVERSION DAM, NEAR PAGOSA SPRINGS, CO

LOCATION.--Lat 37°12'11", long 106°48'45", in NW¼ sec.11, T.34 N., R.1 E., Archuleta County, Hydrologic Unit 14080101, on left bank 250 ft (76 m) downstream from Blanco Diversion Dam, 1.1 mi (1.8 km) downstream from Leche Creek, and 12 mi (19.2 km) southeast of Pagosa Springs.

DRAINAGE AREA.--69.1 mi² (179.2 km²).

PERIOD OF RECORD.--March 1971 to current year.

GAGE.--Water-stage recorder. Datum of gage is 7,848.81 ft (2,392.3 m), National Geodetic Vertical Datum of 1929 (levels by Water and Power Resources Service).

REMARKS.--Flows controlled by diversion dam upstream.

COOPERATION.--Records collected and computed by Water and Power Resources Service.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 1,200 ft^3/s (34.0 m^3/s) May 19, 1972; minimum daily, 6.9 ft^3/s (0.20 m^3/s) Dec. 29, 1976.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 740 ft^3/s (21.0 m^3/s) May 26, gage height, 4.00 ft (1.219 m); minimum daily, 5.7 ft^3/s (0.16 m^3/s) Nov. 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	26	20	14	17	20	22	42	248	95	25	24
2	17	20	18	15	17	20	20	45	356	79	24	23
3	17	27	16	17	17	18	22	43	234	59	24	23
4	16	23	14	18	16	16	19	45	305	42	24	24
5	16	19	20	18	16	16	21	50	498	38	24	24
6	15	17	17	19	16	23	22	83	602	47	24	21
7	15	18	17	19	16	25	22	102	134	63	24	21
8	15	16	16	15	16	29	22	61	286	77	24	21
9	16	16	15	15	16	28	22	42	150	54	24	21
10	16	16	15	17	16	24	22	42	169	32	24	21
11	15	15	16	17	17	28	22	42	185	38	24	21
12	15	17	14	18	20	32	22	43	358	48	24	21
13	15	14	24	18	19	35	22	42	255	35	24	21
14	15	14	22	15	20	37	22	51	238	32	24	21
15	14	5.7	20	18	22	24	22	66	235	29	27	21
16	14	14	20	17	20	23	23	69	185	29	26	21
17	14	21	20	18	20	22	28	83	49	30	26	21
18	14	20	24	18	18	21	35	100	37	28	25	21
19	14	21	25	18	21	20	34	180	18	27	25	21
20	14	21	19	15	23	19	27	228	64	29	25	21
21	16	22	19	15	21	18	26	181	128	29	24	21
22	25	24	20	17	21	18	36	233	309	29	24	21
23	31	20	20	14	21	20	48	393	103	29	24	21
24	40	22	19	15	20	19	58	246	82	29	24	21
25	38	29	20	17	17	21	52	279	85	29	23	21
26	36	24	20	17	19	22	44	423	169	29	23	21
27	34	22	20	17	21	22	43	374	293	29	23	21
28	32	18	24	15	18	22	55	273	203	26	23	21
29	30	18	21	16	---	22	56	315	114	26	23	21
30	28	19	20	15	---	22	58	338	86	26	24	21
31	27	---	20	15	---	22	---	340	---	26	24	---
TOTAL	642	578.7	595	512	521	708	947	4854	6198	1218	750	643
MEAN	20.7	19.3	19.2	16.5	18.6	22.8	31.6	157	207	39.3	24.2	21.4
MAX	40	29	25	19	23	37	58	423	602	95	27	24
MIN	14	5.7	14	14	16	16	19	42	18	26	23	21
AC-FT	1270	1150	1180	1020	1030	1400	1880	9630	12290	2420	1490	1280

CAL YR 1978 TOTAL 9050.9 MEAN 24.8 MAX 131 MIN 5.7 AC-FT 17950
WTR YR 1979 TOTAL 18166.7 MEAN 49.8 MAX 602 MIN 5.7 AC-FT 36030

09344000 NAVAJO RIVER AT BANDED PEAK RANCH, NEAR CHROMO, CO

LOCATION.--Lat 37°05'07", long 106°41'20", in NW¼ sec.24, T.33 N., R.2 E., Archuleta County, Hydrologic Unit 14080101, on left bank at downstream side of private bridge on Banded Peak Ranch, 0.5 mi (0.8 km) downstream from Aspen Creek, 4.0 mi (6.4 km) downstream from East Fork, and 9 mi (14 km) northeast of Chromo.

DRAINAGE AREA.--69.8 mi² (181 km²).

PERIOD OF RECORD.--October 1936 to current year. Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder. Datum of gage is 7,940.6 ft (2,420.29 m) National Geodetic Vertical Datum of 1929 (river-profile survey). Prior to Oct. 1, 1949, at datum 3.00 ft (0.914 m) higher.

REMARKS.--Records good except those for winter period, which are fair. Diversions for irrigation of about 430 acres (1.74 km²) above station. Several observations of water temperature were obtained and are published elsewhere in this report.

COOPERATION.--Records collected and computed by Colorado Division of Water Resources and reviewed by Geological Survey.

AVERAGE DISCHARGE.--43 years, 104 ft³/s (2.945 m³/s), 75,350 acre-ft/yr (92.9 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,350 ft³/s (38.2 m³/s) Sept. 14, 1970, gage height, 4.50 ft (1.372 m), from rating curve extended above 840 ft³/s (24 m³/s), on basis of float-area measurement at gage height 4.44 ft (1.353 m); maximum gage height, 7.02 ft (2.140 m) present datum, May 13, 1941; minimum daily discharge, 8.4 ft³/s (0.24 m³/s) Sept. 29, 1960, result of temporary blockage by channel alteration upstream.

EXTREMES OUTSIDE PERIOD OF RECORD.--A major flood occurred Oct. 5, 1911.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 1,120 ft³/s (31.7 m³/s) June 16; minimum daily, 22 ft³/s (0.62 m³/s) Jan. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	32	29	24	28	29	36	289	732	693	133	60
2	28	31	28	22	28	30	33	293	648	680	123	57
3	28	46	27	25	27	28	34	256	712	593	112	55
4	28	41	27	28	27	28	33	256	773	622	138	50
5	28	40	28	28	28	29	35	318	838	538	98	49
6	27	36	27	28	26	30	39	386	946	522	97	45
7	27	34	27	27	27	32	48	405	962	522	95	44
8	27	32	23	27	27	34	59	336	974	544	97	43
9	27	32	23	28	28	33	65	266	738	494	97	44
10	26	33	24	28	28	34	59	223	538	467	104	43
11	26	35	25	27	28	35	53	190	533	435	119	42
12	26	34	27	28	28	37	46	179	641	395	100	41
13	26	33	28	26	28	39	45	198	780	362	95	41
14	26	33	28	26	28	40	50	270	930	372	93	45
15	26	32	28	26	29	40	68	354	1020	350	155	44
16	26	30	28	25	29	36	98	386	1120	354	135	42
17	26	29	27	26	28	37	137	420	1030	328	119	41
18	25	29	32	28	29	37	179	516	790	301	97	40
19	25	29	26	28	29	36	210	667	597	263	86	40
20	25	29	28	26	29	36	198	719	516	239	81	42
21	28	30	26	27	28	35	210	759	555	220	79	42
22	31	34	25	27	26	35	249	780	654	232	76	41
23	32	32	26	28	26	34	293	830	720	216	74	38
24	38	32	26	28	28	35	314	759	760	201	70	37
25	41	44	25	27	29	36	310	706	760	187	69	37
26	36	37	26	27	30	38	278	801	780	179	72	37
27	34	35	27	26	30	38	266	898	800	168	74	37
28	34	32	29	26	29	38	318	1010	750	165	58	37
29	32	32	29	26	---	37	318	978	712	175	56	36
30	32	29	28	24	---	37	278	1100	693	160	56	36
31	32	---	28	24	---	38	---	845	---	140	54	---
TOTAL	901	1007	835	821	785	1083	4359	16393	22992	11238	2922	1287
MEAN	29.1	33.6	26.9	26.5	28.0	34.9	145	529	766	363	94.3	42.9
MAX	41	46	32	28	30	40	318	1100	1120	693	155	60
MIN	25	29	23	22	26	28	33	179	516	140	54	36
AC-FT	1790	2000	1660	1630	1560	2150	8650	32520	45600	22290	5830	2550

CAL YR 1978 TOTAL 38787 MEAN 106 MAX 794 MIN 19 AC-FT 76930
WTR YR 1979 TOTAL 64623 MEAN 177 MAX 1120 MIN 22 AC-FT 128200

09344400 NAVAJO RIVER BELOW OSO DIVERSION DAM, NEAR CHROMO, CO

LOCATION.--Lat 37°01'48", long 106°44'16", in NE¼ sec. 9, T. 32 N., R. 2 E., Archuleta County, Hydrologic Unit 14080101, on left bank 600 ft (183 m) downstream from Oso Diversion Dam, 5.5 mi (8.8 km) east of Chromo, and 6 mi (9.6 km) upstream from Little Navajo River.

DRAINAGE AREA.--100.5 mi² (260.6 km²).

PERIOD OF RECORD.--March 1971 to current year.

GAGE.--Water-stage recorder. Datum of gage is 7,647.71 ft (2,331.0 m), National Geodetic Vertical Datum of 1929 (levels by Water and Power Resources Service).

REMARKS.--Flows controlled by diversion dam upstream.

COOPERATION.--Records collected and computed by Water and Power Resources Service.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 870 ft³/s (24.6 m³/s) May 11, 1973; minimum daily, 14 ft³/s (0.40 m³/s) Jan. 25, Dec. 28, 29, 1976.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, about 498 ft³/s (14.1 m³/s) June 16; minimum daily, 25 ft³/s (0.71 m³/s) Jan. 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	35	35	32	44	35	38	90	86	150	57	57
2	31	37	33	32	42	36	37	90	65	128	58	57
3	33	45	31	35	40	35	40	90	69	166	59	49
4	31	40	31	37	30	33	37	90	123	227	59	38
5	30	40	33	35	36	34	37	90	135	108	57	45
6	31	40	32	36	35	35	39	91	243	68	56	46
7	30	35	28	38	30	37	39	91	271	93	56	35
8	31	38	27	38	29	42	38	90	263	144	56	31
9	31	39	33	42	32	43	39	90	164	100	56	33
10	27	39	39	55	30	38	40	90	83	57	56	32
11	27	44	39	50	31	39	38	90	89	57	56	33
12	27	43	37	53	33	43	40	90	136	57	56	37
13	28	35	37	48	37	45	39	90	226	56	57	30
14	27	39	36	40	37	47	40	88	274	57	57	38
15	27	39	34	47	40	47	40	89	344	57	58	40
16	27	36	34	43	46	41	38	90	346	57	59	37
17	29	35	37	40	38	36	40	90	237	57	57	35
18	29	35	44	41	35	36	40	89	182	57	57	33
19	29	34	42	40	35	36	39	120	160	58	57	39
20	29	34	40	39	37	36	38	131	111	59	57	45
21	29	35	36	36	37	37	37	175	82	59	58	46
22	33	38	38	26	35	38	54	146	88	59	58	46
23	35	37	38	25	35	38	53	159	153	59	58	44
24	41	38	32	26	35	38	39	252	171	56	59	43
25	50	52	31	38	35	42	38	197	172	61	59	41
26	44	42	30	35	37	41	42	233	175	57	56	40
27	42	40	37	32	37	38	40	261	181	57	57	40
28	39	37	42	27	35	38	42	314	143	57	56	41
29	37	35	41	34	---	39	37	298	139	57	57	40
30	37	35	42	26	---	39	58	270	139	57	58	40
31	37	---	38	28	---	38	---	127	---	57	57	---
TOTAL	1014	1151	1107	1154	1003	1200	1216	4301	5052	2449	1776	1211
MEAN	32.7	38.4	35.7	37.2	35.8	38.7	40.5	139	168	79.0	57.3	40.4
MAX	50	52	44	55	46	47	58	314	346	227	59	57
MIN	27	34	27	25	29	33	37	88	65	56	56	30
AC-FT	2010	2280	2200	2290	1990	2380	2410	8530	10020	4860	3520	2400

CAL YR 1978 TOTAL 15853 MEAN 43.4 MAX 141 MIN 15 AC-FT 31440
WTR YR 1979 TOTAL 22634 MEAN 62.0 MAX 346 MIN 25 AC-FT 44890

09345200 LITTLE NAVAJO RIVER BELOW LITTLE OSO DIVERSION DAM, NEAR CHROMO, CO

LOCATION.--Lat 37°04'32", long 106°48'38", in SW¼ sec.23, T.33 N., R.1 E., Archuleta County, Hydrologic Unit 14080101, on right bank at Little Oso Diversion Dam, 3.5 mi (5.6 km) northeast of Chromo, and 4.0 mi (6.4 km) upstream from confluence with Navajo River.

DRAINAGE AREA.--14.2 mi² (36.8 km²).

PERIOD OF RECORD.--June 1971 to current year.

GAGE.--Water-stage recorder. Datum of gage is 7,756.10 ft (2,364.1 m), National Geodetic Vertical Datum of 1929 (levels by Water and Power Resources Service).

REMARKS.--Flows controlled by diversion dam upstream.

COOPERATION.--Records collected and computed by Water and Power Resources Service.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 235 ft³/s (6.66 m³/s) May 30, 1979; no flow Apr. 14, 1974.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 235 ft³/s (6.66 m³/s) May 30; minimum daily, 1.3 ft³/s (0.034 m³/s) Oct. 2-9, 18, Sept. 13, 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	2.0	2.1	2.0	1.9	2.1	3.6	14	12	28	4.2	2.2
2	1.3	2.4	1.9	2.0	1.9	2.1	3.5	23	21	29	4.2	2.6
3	1.3	3.7	2.2	1.9	1.9	2.0	3.0	23	29	27	5.2	3.0
4	1.3	3.3	2.1	1.9	1.9	2.0	3.0	22	27	20	3.9	2.0
5	1.3	2.9	2.0	1.9	1.9	2.0	4.0	29	28	25	3.6	1.7
6	1.3	2.6	2.0	2.0	1.9	2.0	7.9	30	28	28	2.9	1.6
7	1.3	2.4	2.0	2.0	1.9	2.5	14	26	27	28	2.8	2.2
8	1.3	2.2	2.0	1.9	1.9	3.2	19	26	37	26	2.9	2.5
9	1.3	2.4	1.9	1.9	1.9	3.3	12	29	33	23	3.6	1.9
10	1.4	2.1	1.9	1.9	1.9	2.8	4.1	29	27	22	3.7	1.9
11	1.4	2.4	1.9	1.9	1.9	3.3	4.3	29	27	20	6.4	1.6
12	1.4	2.5	1.9	1.9	1.9	3.5	4.1	29	28	18	3.4	1.4
13	1.4	2.2	2.0	2.0	2.0	3.5	4.3	29	27	17	5.3	1.3
14	1.4	2.4	2.0	1.9	2.1	3.8	4.4	30	30	15	4.9	2.2
15	1.4	2.2	2.0	2.0	2.1	3.8	4.6	28	28	13	8.7	2.5
16	1.4	2.1	2.1	2.0	2.1	2.5	4.4	30	27	13	7.0	2.5
17	1.4	1.6	2.1	2.0	2.1	2.4	4.4	28	26	13	5.2	2.0
18	1.3	1.6	2.1	2.1	2.1	2.2	4.6	40	25	16	4.3	1.6
19	1.5	1.9	2.2	2.1	2.1	1.7	4.2	24	27	13	3.9	1.5
20	1.4	2.2	2.2	2.1	2.1	2.9	4.3	26	28	9.9	3.8	1.6
21	1.9	2.4	2.1	2.0	2.1	2.8	3.7	31	27	9.4	3.5	1.7
22	2.4	3.0	2.1	1.9	2.1	2.8	4.8	53	26	8.6	3.2	1.7
23	2.5	2.2	2.1	1.9	2.1	2.8	4.4	56	27	7.4	3.4	1.7
24	3.6	2.3	2.1	1.9	2.1	3.0	4.2	36	28	6.9	3.9	1.6
25	3.8	3.0	2.1	1.9	2.1	4.0	4.1	41	27	6.1	2.6	1.5
26	2.6	3.2	2.0	1.9	2.1	5.2	4.0	26	27	5.6	2.6	1.4
27	3.0	2.2	2.0	1.9	2.1	5.6	4.6	19	27	5.6	2.5	1.4
28	3.2	1.9	2.0	1.9	2.1	4.9	4.8	26	28	6.0	2.4	1.4
29	2.6	2.0	2.0	1.9	---	4.8	3.8	26	28	5.8	2.5	1.3
30	2.4	2.1	2.0	1.9	---	4.4	4.2	37	27	5.1	2.5	1.5
31	2.2	---	2.0	1.9	---	4.6	---	13	---	4.7	2.6	---
TOTAL	57.4	71.4	63.1	60.4	56.3	98.6	160.3	908	814	475.1	121.6	55.0
MEAN	1.85	2.38	2.04	1.95	2.01	3.18	5.34	29.3	27.1	15.3	3.92	1.83
MAX	3.8	3.7	2.2	2.1	2.1	5.6	19	56	37	29	8.7	3.0
MIN	1.3	1.6	1.9	1.9	1.9	1.7	3.0	13	12	4.7	2.4	1.3
AC-FT	114	142	125	120	112	196	318	1800	1610	942	241	109

CAL YR 1978 TOTAL 2399.8 MEAN 6.57 MAX 78 MIN 1.1 AC-FT 4760
WTR YR 1979 TOTAL 2941.2 MEAN 8.06 MAX 55 MIN 1.3 AC-FT 5830

09346000 NAVAJO RIVER AT EDITH, CO

LOCATION.--Lat 37°00'10", long 106°54'25", in NW¼NW¼ sec.24, T.32 N., R.1 W., Archuleta County, Hydrologic Unit 14080101, on right bank 290 ft (88 m) downstream from highway bridge, 0.2 mi (0.3 km) southeast of Edith, 0.5 mi (0.8 km) upstream from Colorado-New Mexico State line, and 1.3 mi (2.1 km) upstream from Coyote Creek.

DRAINAGE AREA.--172 mi^2 (445 km^2).

PERIOD OF RECORD.--September 1912 to current year. Monthly or yearly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1243: 1943, 1945. WSP 1633: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 7,033.00 ft (2,143.658 m), National Geodetic Vertical Datum of 1929 (levels by Water and Power Resources Service. Prior to Jan. 1, 1929, nonrecording gage at site 240 ft (73 m) upstream at different datum. June 2, 1935, to June 27, 1941, water-stage recorder at sites 200 and 240 ft (61 and 73 m) upstream at datum 2.0 ft (0.61 m) higher. June 28, 1941, to June 20, 1961, at site 50 ft (15 m) downstream at same datum.

REMARKS.--Records good except those for winter period, which are poor. Diversions for irrigation of about 1,700 acres (6.88 km^2) above station. High-water diversions above station into Heron Reservoir through Azotea tunnel began in March 1971. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--58 years (water years 1913-70), 155 ft^3/s (4.390 m^3/s), 112,300 acre-ft/yr (138 hm^3/yr), prior to diversions through Azotea tunnel; 9 years (water years 1971-79), 63.3 ft^3/s (1.793 m^3/s), 45,860 acre-ft/yr (56.5 hm^3/yr), subsequent to diversion through Azotea tunnel.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,840 ft^3/s (80.4 m^3/s) Apr. 23, 1942, gage height, 6.55 ft (1.996 m), from rating curve extended above 1,100 ft^3/s (31 m^3/s); minimum daily, 8.0 ft^3/s (0.23 m^3/s) Sept. 25, 1953, Aug. 7, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 5, 1911, exceeded all other observed floods at this location.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 694 ft^3/s (19.6 m^3/s) Apr. 18, gage height, 4.65 ft (1.417 m); maximum gage height, 5.76 ft (1.756 m) Dec. 4 (backwater from ice); minimum daily discharge, 17 ft^3/s (0.48 m^3/s) Oct. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	39	39	26	30	32	66	178	165	163	48	47
2	30	37	30	24	30	34	61	178	140	141	57	47
3	31	48	24	24	32	34	61	170	158	178	60	47
4	22	40	20	24	30	30	57	170	188	196	57	48
5	17	39	30	26	28	30	68	175	192	98	56	47
6	20	38	26	28	28	32	105	165	300	66	54	45
7	24	34	22	28	28	34	158	165	344	83	56	41
8	34	37	20	30	28	40	195	165	348	116	51	40
9	33	37	20	32	28	48	170	175	262	108	52	41
10	32	37	20	32	28	50	132	168	160	61	51	45
11	32	39	20	30	28	50	99	155	140	52	57	40
12	31	43	22	30	28	55	85	152	183	57	56	42
13	32	38	22	30	30	60	89	150	268	60	58	40
14	31	40	22	30	30	60	135	155	324	61	62	40
15	31	39	20	30	32	60	245	150	405	66	66	47
16	31	37	20	30	32	63	295	148	415	60	59	42
17	31	37	20	30	34	58	327	145	272	63	58	42
18	30	37	24	30	34	57	393	152	203	65	63	41
19	32	37	26	30	34	56	307	165	185	63	62	39
20	32	37	26	28	36	54	224	188	149	63	51	32
21	31	39	26	28	36	56	212	234	101	63	51	33
22	37	40	26	30	34	54	234	224	87	66	60	39
23	40	40	28	32	32	56	237	245	160	68	58	37
24	43	41	26	30	32	60	198	300	183	65	49	34
25	53	54	26	32	32	68	180	287	178	65	45	33
26	45	48	26	32	32	80	170	395	185	63	43	32
27	42	45	26	32	32	80	158	385	187	62	49	34
28	41	40	26	32	34	78	160	435	200	61	52	39
29	40	40	26	32	---	80	150	415	145	62	54	37
30	39	38	26	32	---	71	145	385	141	57	51	37
31	39	---	26	30	---	74	---	209	---	53	49	---
TOTAL	1036	1195	761	914	872	1694	5116	6783	6368	2505	1735	1208
MEAN	33.4	39.8	24.5	29.5	31.1	54.5	171	219	212	80.8	56.0	40.3
MAX	53	54	39	32	36	80	393	435	415	196	69	48
MIN	17	34	20	24	28	30	57	145	87	52	43	32
AC-FT	2050	2370	1510	1810	1730	3360	10150	13450	12630	4970	3440	2400

CAL YR 1978 TOTAL 18063 MEAN 49.5 MAX 155 MIN 11 AC-FT 35830
WTR YR 1979 TOTAL 30187 MEAN 82.7 MAX 435 MIN 17 AC-FT 59880

09346400 SAN JUAN RIVER NEAR CARRACAS, CO

LOCATION.--Lat 37°00'49", long 107°18'42", in SE¼SW¼ sec.17, T.32 N., R.4 W., Archuleta County, Hydrologic Unit 14080101, on right bank just upstream from flow line of Navajo Reservoir, 3 mi (5 km) northwest of Carracas, 7.2 mi (11.6 km) upstream from Piedra River, and at mile 332.8 (535.5 km).

DRAINAGE AREA.--1,230 mi² (3,190 km²), approximately.

PERIOD OF RECORD.--October 1961 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,090 ft (1,856 m), from river-profile map.

REMARKS.--Records fair except those for winter period, which are poor. Diversions for irrigation of about 11,000 acres (45 km²) above station. Highwater diversions above station into Rio Grande basin through Azotea tunnel (station 08284160) began in March 1971. Several observations of water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--9 years (water years 1962-70), 632 ft³/s (17.90 m³/s), 457,900 acre-ft/yr (555 hm³/yr), prior to completion of Azotea tunnel.
9 years (water years 1971-79), 559 ft³/s (15.83 m³/s), 405,000 acre-ft/yr (499 hm³/yr) since completion of Azotea tunnel.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,730 ft³/s (276 m³/s) Sept. 6, 1970, gage height, 8.34 ft (2.542 m), from rating curve extended above 6,000 ft³/s (170 m³/s), on basis of slope-area measurement of peak flow; minimum daily, about 5 ft³/s (0.1 m³/s) Dec. 10, 1961, result of freezeup.

EXTREMES OUTSIDE PERIOD OF RECORD.--Major floods occurred Sept. 5 or 6, 1909; Oct. 5, 1911; June 29, 1927.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,500 ft³/s (71 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Apr. 19	0315	*7,630	216	7.40	2.256	June 7	0930	6,020	170	6.64	2.024
May 27	0545	6,770	192	6.96	2.121	June 16	1015	5,410	153	6.38	1.945

Minimum daily discharge, 63 ft³/s (1.78 m³/s) Oct. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	89	128	140	120	140	180	913	2450	3730	3250	507	210
2	86	123	152	110	142	190	747	2230	3180	3030	457	196
3	83	230	122	110	150	200	721	2050	3580	2810	438	191
4	80	222	88	110	150	180	714	1900	3850	2720	416	182
5	75	195	111	120	130	200	929	1970	3800	2350	395	176
6	63	172	110	125	130	250	1450	2200	4650	2250	373	167
7	64	151	105	138	135	300	2110	2480	5250	2240	351	157
8	69	138	105	140	130	350	2740	2270	4590	2280	356	155
9	79	138	90	152	122	400	2610	2000	4140	2240	346	150
10	79	138	100	150	124	450	2430	1760	2880	2040	329	144
11	78	140	110	140	128	500	1620	1570	2600	1920	353	137
12	78	236	120	145	130	700	1230	1460	2980	1820	418	117
13	79	240	130	150	135	900	1340	1380	3670	1750	434	104
14	79	181	120	140	140	1200	1570	1510	4390	1690	391	103
15	76	171	110	140	150	1500	2550	1780	4390	1680	470	120
16	77	161	110	145	155	1230	3830	1950	4630	1580	910	130
17	76	147	120	138	160	1070	4810	1990	3870	1520	769	116
18	75	134	140	142	160	845	5200	2110	3320	1490	600	111
19	76	128	130	140	158	708	5180	2810	2720	1340	527	102
20	75	125	120	135	170	731	3430	3760	2310	1270	470	102
21	82	135	110	130	165	884	2720	3470	2340	1260	422	103
22	105	143	110	142	160	749	2920	3970	2580	1210	354	108
23	146	150	110	155	158	738	3210	4460	2900	1160	338	110
24	162	145	110	140	150	891	3300	4320	2950	1070	308	106
25	257	250	110	150	150	1090	3060	4240	2800	1020	272	99
26	227	225	100	150	160	1240	2880	4980	3060	977	259	95
27	182	176	110	152	170	1210	2700	5610	3210	904	260	98
28	158	155	120	150	180	1140	2900	5090	3460	852	252	98
29	152	130	130	140	---	1430	3200	5120	3350	876	232	103
30	136	143	130	140	---	1130	2700	5040	3190	807	225	100
31	130	---	120	138	---	1200	---	4110	---	580	230	---
TOTAL	3273	4950	3593	4277	4132	23786	75714	92040	104370	51986	12502	3890
MEAN	106	165	116	138	148	767	2524	2969	3479	1677	403	130
MAX	257	250	152	155	180	1500	5200	5610	5250	3250	910	210
MIN	63	123	88	110	122	180	714	1380	2310	580	225	95
AC-FT	6490	9820	7130	8480	8200	47180	150200	182600	207000	103100	24800	7720

CAL YR 1978 TOTAL 171146 MEAN 469 MAX 2500 MIN 31 AC-FT 339500
WTR YR 1979 TOTAL 384513 MEAN 1053 MAX 5610 MIN 63 AC-FT 762700

09347205 MIDDLE FORK PIEDRA RIVER NEAR DYKE, CO

LOCATION.--Lat 37°27'10", long 107°10'33", in NE¼SW¼ sec.13, T.37 N., R.3 W., Hinsdale County, Hydrologic Unit 14080102, on left bank 1.8 mi (2.9 km) northeast of Piedra Guard Station, 2 mi (3.2 km) downstream from headgate of Toner-Taylor ditch, and 15 mi (24 km) northwest of Pagosa Springs.

DRAINAGE AREA.--34.1 mi² (88.3 km²).

PERIOD OF RECORD.--October 1977 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 7,860 ft (2,400 m). (Record is not equivalent to record for station 09347200.)

REMARKS.--Records good except those for period of no gage-height record and those for winter period, which are poor. There is one small diversion above station for irrigation of a few acres of hay meadow below the station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 700 ft³/s (19.8 m³/s) at 2330 May 25, gage height, 3.63 ft (1.106 m); minimum daily, 2.0 ft³/s (0.057 m³/s) Oct. 17-20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.6	8.7	8.0	5.0	6.0	5.5	12	175	256	470	50	23
2	4.0	8.7	5.0	5.0	6.0	5.5	12	264	236	395	45	18
3	4.4	13	6.5	5.5	5.5	5.5	12	253	260	355	38	15
4	4.7	12	7.5	6.0	5.0	5.5	12	268	296	264	34	15
5	4.7	14	6.0	6.0	5.0	5.0	12	320	355	283	32	14
6	4.7	12	5.0	6.5	5.0	5.5	15	390	380	246	29	13
7	5.0	10	4.8	6.5	5.0	6.0	21	400	430	296	27	12
8	5.4	9.9	4.8	6.5	5.0	6.5	30	315	375	320	25	12
9	4.7	9.9	4.8	6.5	5.0	7.0	36	246	300	288	25	12
10	4.7	9.5	5.0	6.5	5.0	8.0	32	218	236	264	23	12
11	4.7	14	5.5	6.5	5.0	8.5	27	190	276	239	20	12
12	4.7	21	5.5	6.5	5.0	8.0	24	190	395	280	32	12
13	4.7	15	5.0	6.0	5.0	9.5	23	218	485	260	28	12
14	4.7	13	4.8	6.0	5.5	10	23	276	568	250	24	12
15	4.4	14	5.0	6.0	5.5	11	35	288	568	222	34	12
16	3.6	12	4.6	6.0	5.5	11	54	272	485	172	50	11
17	2.0	11	5.0	5.8	6.0	11	77	276	455	160	46	9.5
18	2.0	11	5.0	5.8	6.0	11	91	320	360	155	40	9.1
19	2.0	11	5.5	5.4	6.0	9.5	101	330	315	135	34	8.7
20	2.0	11	6.0	5.5	6.0	9.0	95	276	272	228	32	8.7
21	3.8	12	6.5	6.0	6.0	8.5	101	272	350	166	30	8.3
22	9.9	12	6.0	6.5	5.5	8.5	122	284	370	148	28	8.3
23	10	12	6.0	6.0	5.5	8.0	150	292	435	115	28	7.9
24	19	12	6.0	6.0	5.0	8.0	160	315	445	107	28	7.9
25	18	14	5.5	6.0	5.0	9.5	160	300	445	93	26	7.9
26	12	11	5.5	6.0	5.5	10	163	505	435	86	26	7.9
27	11	11	5.5	6.0	5.5	12	155	495	470	75	26	7.9
28	9.9	10	5.5	6.0	5.0	13	208	375	515	74	26	7.9
29	9.5	10	5.5	6.0	---	12	225	355	530	80	27	7.9
30	9.1	9.0	5.5	6.0	---	12	194	340	495	69	28	7.2
31	8.7	---	5.5	6.0	---	14	---	256	---	56	28	---
TOTAL	201.6	353.7	172.3	186.0	151.0	274.0	2382	9274	11813	6348	979	333.1
MEAN	6.50	11.8	5.56	6.00	5.39	8.84	79.4	299	394	205	31.6	11.1
MAX	19	21	8.0	6.5	6.0	14	225	505	568	470	50	23
MIN	2.0	8.7	4.6	5.0	5.0	5.0	12	175	236	56	20	7.2
AC-FT	400	702	342	369	300	543	4720	18390	23430	12590	1940	661

CAL YR 1978 TOTAL 13856.1 MEAN 38.0 MAX 380 MIN 2.0 AC-FT 27480
WTR YR 1979 TOTAL 32467.7 MEAN 89.0 MAX 568 MIN 2.0 AC-FT 64400

NOTE.--NO GAGE-HEIGHT RECORD JAN. 31 TO MAR. 29.

09349800 PIEDRA RIVER NEAR ARBOLES, CO

LOCATION.--Lat 37°05'18", long 107°23'50", in NE¼SW¼ sec.21, T.33 N., R.5 W., Archuleta County, Hydrologic Unit 14080102, on left bank 3 mi (5 km) downstream from Ignacio Creek, 5.2 mi (8.4 km) northeast of Arboles Post Office, and 8 mi (13 km) upstream from mouth.

DRAINAGE AREA.--629 mi² (1,629 km²).

PERIOD OF RECORD.--August 1962 to current year. Gage operated 1895-99 and 1910-27 at site 7.5 mi (12.1 km) downstream at altitude 6,000 ft (1,830 m). Low-flow records probably not equivalent.

GAGE.--Water-stage recorder. Datum of gage is 6,147.52 ft (1,873.764 m) Colorado State Highway Department bench mark.

REMARKS.--Records good except those for winter period, which are poor. Diversions for irrigation of about 2,800 acres (11 km²) above station. Several observations of water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--17 years, 365 ft³/s (10.34 m³/s), 264,400 acre-ft/yr (326 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,370 ft³/s (237 m³/s) Sept. 6, 1970, gage height, 5.38 ft (1.945 m) recorded, 7.55 ft (2.301 m) from floodmarks, from rating curve extended above 4,400 ft³/s (125 m³/s), on basis of slope-area measurement of peak flow; minimum, 11 ft³/s (0.31 m³/s) Dec. 9, 1953, Oct. 1, 1956.

EXTREMES OUTSIDE PERIOD OF RECORD.--Major floods occurred Sept. 5 or 6, 1909, and Oct. 5, 1911.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,500 ft³/s (42 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Apr. 24	0230	5,380	152	5.42	1.652	June 7	0715	3,830	108	4.86	1.481
May 27	0445	*5,890	167	5.69	1.734	June 14	0745	3,360	95.2	4.59	1.399

Minimum daily discharge, 35 ft³/s (0.99 m³/s) Oct. 19, 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43	68	76	56	68	156	489	2920	2970	2060	308	150
2	38	67	83	54	68	203	427	3070	2640	2010	279	145
3	38	99	76	52	70	190	404	2600	2610	1850	245	140
4	38	120	80	54	70	177	386	2440	2750	1530	225	135
5	38	95	81	58	62	173	465	2750	2870	1440	210	130
6	37	94	80	60	60	189	688	3010	3330	1360	233	120
7	36	85	65	64	64	220	1050	3350	3610	1390	224	115
8	36	80	54	64	60	308	1310	2950	3370	1440	230	110
9	37	77	50	70	60	360	1380	2360	2790	1400	223	100
10	37	75	54	72	61	272	1410	1900	2250	1300	217	96
11	38	100	56	66	62	265	1030	1490	2170	1240	216	94
12	38	325	58	68	63	309	803	1290	2470	1190	333	91
13	35	215	60	70	64	360	725	1250	2920	1130	352	89
14	36	145	64	66	66	364	892	1560	3170	1160	278	86
15	36	119	64	66	70	429	1420	2040	3060	1280	358	90
16	36	106	62	67	73	462	2130	2530	3070	1190	859	93
17	36	96	60	64	76	402	2800	2750	2790	1140	780	91
18	36	85	65	66	77	408	3190	2610	2460	1120	655	88
19	35	83	70	68	80	387	3580	3090	1970	1030	657	85
20	35	82	60	65	90	396	3080	3410	1690	1010	541	84
21	39	82	56	62	100	438	2990	3230	1750	950	437	83
22	52	89	56	66	110	391	3330	3520	1970	864	353	83
23	71	86	56	72	120	408	4040	3580	2160	754	321	80
24	83	84	56	66	110	450	4420	3400	2220	655	237	74
25	123	132	56	68	115	521	3930	3310	2130	580	270	70
26	106	105	54	71	132	594	3990	4030	2090	524	235	67
27	83	97	56	72	135	579	3320	4300	2120	485	220	64
28	76	83	58	70	132	554	3450	4630	2190	425	200	65
29	73	82	62	70	---	735	3650	4160	2170	433	175	65
30	71	79	60	67	---	569	2990	3900	2030	474	155	63
31	70	---	57	63	---	593	---	3290	---	359	150	---
TOTAL	1586	3135	1945	2022	2318	11863	63769	90720	75790	33873	10236	2847
MEAN	51.2	105	62.7	65.2	82.8	383	2126	2926	2526	1093	330	94.9
MAX	123	325	83	72	135	735	4420	4630	3610	2060	859	150
MIN	35	67	50	52	60	156	386	1250	1690	359	150	63
AC-FT	3150	6220	3860	4010	4600	23530	126500	179900	150300	67190	20300	5650

CAL YR 1978 TOTAL 117296 MEAN 321 MAX 2070 MIN 25 AC-FT 232700
WTR YR 1979 TOTAL 300104 MEAN 822 MAX 4630 MIN 35 AC-FT 595300

09352900 VALLECITO CREEK NEAR BAYFIELD, CO
(Hydrologic bench-mark station)

LOCATION.--Lat 37°28'39", long 107°32'35", in NE¼NW¼ sec.16, T.37 N., R.6 W., La Plata County, Hydrologic Unit 14080101, on right bank 60 ft (18 m) upstream from Fall Creek, 0.8 mi (1.3 km) downstream from Bear Creek, 6.7 mi (10.8 km) north of Vallecito Dam, and 18 mi (29 km) north of Bayfield.

DRAINAGE AREA.--72.1 mi² (186.7 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1962 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 7,905.80 ft (2,409.773 m), National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. No diversion above station.

AVERAGE DISCHARGE.--17 years, 139 ft³/s (3.936 m³/s), 100,700 acre-ft/yr (124 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,050 ft³/s (200 m³/s) Sept. 6, 1970, gage height, 5.51 ft (1.679 m) from water-stage recorder, 6.76 ft (2.060 m) from floodmarks, from rating curve extended above 1,400 ft³/s (40 m³/s), on basis of slope-area measurement of peak flow; minimum daily, 6.7 ft³/s (0.19 m³/s) Dec. 28, 1976.

EXTREMES OUTSIDE PERIOD OF RECORD.--Major floods occurred in October 1911 and June 1927.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,000 ft³/s (28 m³/s), and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
May 22	2300	1,100	31.2	2.90	0.884	June 13	2100	1,310	37.1	3.12	0.951
May 26	2300	1,270	36.0	3.08	0.939	July 1	2230	1,080	30.6	2.88	0.878
June 6	2100	*1,390	39.4	3.20	0.975						

Minimum daily discharge, 12 ft³/s (0.34 m³/s) Jan. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	27	27	22	20	20	29	228	760	898	196	88
2	27	26	26	20	20	19	29	224	728	916	192	84
3	26	34	24	20	19	20	28	220	768	784	172	80
4	24	34	31	20	18	19	29	224	848	656	172	77
5	24	38	31	19	18	19	28	275	1010	648	170	74
6	23	34	20	19	17	20	31	362	1150	616	170	69
7	22	31	19	19	16	21	39	386	1140	640	150	66
8	22	29	31	18	17	24	53	332	934	648	150	65
9	20	30	38	19	17	25	66	265	704	600	150	62
10	19	30	38	19	19	26	65	220	640	584	140	62
11	19	41	31	19	20	26	58	184	816	552	190	61
12	18	52	32	19	19	29	53	168	979	528	220	58
13	18	42	30	18	19	32	50	164	1120	520	180	55
14	17	48	28	21	19	32	52	208	1100	488	170	53
15	17	42	27	20	19	32	68	290	1100	473	300	51
16	17	40	25	19	20	32	100	386	1100	438	410	46
17	16	39	24	16	20	32	130	398	997	424	290	42
18	16	38	22	12	19	30	150	520	784	362	240	39
19	16	37	22	19	20	29	168	744	560	308	210	38
20	15	35	24	18	20	25	160	744	536	308	180	37
21	19	33	26	17	19	21	168	744	704	302	150	35
22	27	33	25	19	19	28	192	889	832	332	130	35
23	25	31	25	20	19	30	228	943	925	326	120	33
24	28	31	24	19	20	32	250	808	925	314	110	32
25	31	31	25	19	20	33	228	792	880	308	100	30
26	26	30	26	18	20	32	216	979	916	290	100	29
27	25	28	26	18	20	32	212	1140	907	265	100	29
28	25	26	26	18	19	31	220	1070	934	250	96	29
29	26	28	24	19	---	31	250	1070	872	265	94	28
30	27	27	23	18	---	31	236	1050	848	240	96	27
31	27	---	22	20	---	31	---	848	---	208	96	---
TOTAL	690	1025	822	581	532	845	3586	16875	26517	14491	5254	1516
MEAN	22.3	34.2	26.5	18.7	19.0	27.3	120	544	884	467	159	50.5
MAX	31	52	38	22	20	33	250	1140	1150	916	410	88
MIN	15	26	19	12	16	19	28	164	536	208	94	27
AC-FT	1370	2030	1630	1150	1060	1680	7110	33470	52600	28740	10420	3010

CAL YR 1978 TOTAL 43676 MEAN 120 MAX 864 MIN 10 AC-FT 86630
WTR YR 1979 TOTAL 72734 MEAN 199 MAX 1150 MIN 12 AC-FT 144300

09352900 VALLECITO CREEK NEAR BAYFIELD, CO--Continued
(Hydrologic Bench-Mark Station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1962 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: November 1962 to current year.

INSTRUMENTATION.--Water-temperature recorder since November 1962.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 20.0°C July 10, 1974; minimum, freezing point on many days during winter months each year.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 15.0°C July 29, Aug. 3, 4; minimum, freezing point on many days during winter months.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	COLIFORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, (COLS. PER 100 ML)
NOV									
01...	0930	27	100	7.8	4.0	9.8	31	K2	K10
29...	1025	24	78	7.8	1.0	10.4	K19	<1	K4
DEC									
28...	0910	24	79	8.4	.0	10.8	K2	<1	<1
JAN									
29...	1015	1.8	90	8.4	.0	10.8	K10	K9	<1
FEB									
28...	0900	19	100	7.6	.0	10.8	--	K5	K4
MAR									
28...	0920	31	95	7.7	3.0	10.0	--	K3	<1
MAY									
02...	1025	226	60	7.7	6.0	9.4	<1	<1	<1
23...	1345	879	60	7.4	5.0	9.4	34	K2	K1
JUL									
02...	1230	808	43	7.1	5.0	9.5	25	K2	K2
AUG									
02...	0830	206	36	6.8	8.0	8.8	>200	K1	K20
28...	0900	100	56	7.3	7.0	9.0	K3	<1	<1

DATE	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)
NOV									
01...	34	12	9.8	2.2	1.3	.1	.5	22	14
29...	37	12	10	2.9	2.1	.2	.6	25	12
DEC									
28...	34	7	10	2.2	1.3	.1	.6	27	12
JAN									
29...	44	13	13	2.8	2.0	.1	2.4	31	14
FEB									
28...	47	18	13	3.5	2.9	.2	.9	29	20
MAR									
28...	42	16	13	2.2	1.1	.1	.6	26	8.7
MAY									
02...	33	11	9.8	2.0	1.1	.1	.6	22	7.7
23...	29	13	9.0	1.7	1.2	.1	.2	16	10
JUL									
02...	19	3	5.7	1.1	.5	.1	.3	16	3.4
AUG									
02...	16	8	4.8	.9	.6	.1	.6	8	9.3
28...	23	6	6.8	1.4	1.2	.1	.5	17	11

K BASED ON NON-IDEAL COLONY COUNT.

09352900 VALLECITO CREEK NEAR BAYFIELD, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)
NOV									
01...	.5	.2	3.9	--	46	--	3.35	.12	.00
29...	.5	.2	3.9	37	47	.06	3.05	.14	.00
DEC									
28...	.7	.2	4.0	47	47	.06	3.05	.14	.07
JAN									
29...	2.3	.2	4.6	62	60	.08	.29	.14	.00
FEB									
28...	.7	.2	4.7	57	63	.09	3.23	.14	.01
MAR									
28...	.5	.2	4.0	41	46	.06	3.85	.11	.00
MAY									
02...	.4	.2	4.6	44	40	.05	24.4	.09	.01
23...	.8	.2	4.1	38	37	.05	87.8	.17	.03
JUL									
02...	.5	.2	2.6	23	24	.03	52.4	.07	.05
AUG									
02...	.4	.9	2.5	23	25	.03	13.5	.04	.01
28...	.3	.3	2.8	30	35	.05	9.45	.05	.00

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)
MAY							
23...	1345	1	0	1	0	1	170

DATE	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	SELENIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	CYANIDE TOTAL (MG/L AS CN)
MAY							
23...	15	20	.0	1	0	10	.00

09352900 VALLECITO CREEK NEAR BAYFIELD, CO--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	7.0	5.0	5.0	4.0	1.0	1.0	.0	.0	.0	.0	.0	.0
2	7.0	5.0	5.0	4.0	1.0	1.0	.0	.0	.0	.0	.0	.0
3	7.0	4.0	4.0	3.0	1.0	1.0	.0	.0	.0	.0	.0	.0
4	5.0	3.0	4.0	3.0	1.0	1.0	.0	.0	.0	.0	.0	.0
5	5.0	3.0	4.0	3.0	1.0	1.0	.0	.0	.0	.0	.0	.0
6	5.0	3.0	3.0	2.0	1.0	1.0	.0	.0	.0	.0	.0	.0
7	5.0	3.0	2.0	1.0	1.0	1.0	.0	.0	.0	.0	1.0	.0
8	5.0	2.0	2.0	1.0	1.0	.0	.0	.0	.0	.0	1.0	1.0
9	5.0	3.0	2.0	1.0	.0	.0	.0	.0	.0	.0	1.0	1.0
10	5.0	3.0	2.0	1.0	.0	.0	.0	.0	.0	.0	1.0	1.0
11	5.0	3.0	1.0	1.0	.0	.0	.0	.0	.0	.0	2.0	1.0
12	5.0	3.0	1.0	1.0	.0	.0	.0	.0	.0	.0	2.0	2.0
13	5.0	3.0	1.0	1.0	.0	.0	.0	.0	.0	.0	2.0	2.0
14	5.0	3.0	1.0	1.0	.0	.0	.0	.0	.0	.0	2.0	2.0
15	5.0	3.0	1.0	1.0	.0	.0	.0	.0	.0	.0	2.0	2.0
16	4.0	3.0	1.0	1.0	.0	.0	.0	.0	.0	.0	2.0	2.0
17	3.0	3.0	1.0	1.0	.0	.0	.0	.0	.0	.0	2.0	2.0
18	4.0	3.0	1.0	1.0	.0	.0	.0	.0	.0	.0	2.0	2.0
19	4.0	3.0	1.0	1.0	.0	.0	.0	.0	.0	.0	2.0	2.0
20	3.0	3.0	1.0	1.0	.0	.0	.0	.0	.0	.0	2.0	1.0
21	3.0	3.0	1.0	1.0	.0	.0	.0	.0	.0	.0	1.0	1.0
22	3.0	3.0	1.0	1.0	.0	.0	.0	.0	.0	.0	1.0	1.0
23	4.0	3.0	1.0	1.0	.0	.0	.0	.0	.0	.0	1.0	1.0
24	3.0	3.0	1.0	1.0	.0	.0	.0	.0	.0	.0	1.0	1.0
25	3.0	2.0	1.0	1.0	.0	.0	.0	.0	.0	.0	2.0	1.0
26	4.0	.0	1.0	1.0	.0	.0	.0	.0	.0	.0	3.0	2.0
27	2.0	.0	1.0	1.0	.0	.0	.0	.0	.0	.0	3.0	2.0
28	2.0	.0	1.0	1.0	.0	.0	.0	.0	.0	.0	3.0	3.0
29	2.0	.0	1.0	1.0	.0	.0	.0	.0	---	---	3.0	2.0
30	2.0	.0	1.0	1.0	.0	.0	.0	.0	---	---	3.0	2.0
31	3.0	.0	---	---	.0	.0	.0	.0	---	---	3.0	2.0

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	3.0	2.0	7.0	6.0	9.0	7.0	11.0	9.0	14.0	8.0	14.0	6.0
2	2.0	2.0	8.0	6.0	10.0	7.0	9.0	5.0	14.0	8.0	13.0	9.0
3	2.0	2.0	7.0	6.0	10.0	7.0	7.0	6.0	15.0	9.0	13.0	9.0
4	3.0	2.0	10.0	6.0	11.0	7.0	10.0	5.0	15.0	9.0	13.0	10.0
5	4.0	3.0	9.0	6.0	11.0	8.0	9.0	6.0	14.0	7.0	13.0	9.0
6	5.0	4.0	9.0	6.0	11.0	7.0	9.0	6.0	14.0	7.0	13.0	9.0
7	5.0	4.0	7.0	6.0	9.0	7.0	11.0	6.0	14.0	7.0	13.0	10.0
8	5.0	4.0	7.0	5.0	8.0	8.0	10.0	6.0	14.0	7.0	13.0	10.0
9	4.0	3.0	6.0	5.0	11.0	7.0	11.0	5.0	14.0	7.0	14.0	10.0
10	3.0	2.0	7.0	5.0	12.0	6.0	11.0	6.0	14.0	7.0	14.0	10.0
11	4.0	3.0	8.0	4.0	12.0	7.0	11.0	6.0	14.0	7.0	14.0	18.0
12	4.0	3.0	10.0	5.0	12.0	7.0	12.0	6.0	14.0	7.0	13.0	9.0
13	5.0	3.0	11.0	5.0	12.0	8.0	11.0	6.0	14.0	7.0	12.0	7.0
14	6.0	4.0	10.0	6.0	10.0	8.0	12.0	6.0	14.0	7.0	10.0	9.0
15	6.0	4.0	10.0	6.0	11.0	8.0	10.0	7.0	14.0	7.0	10.0	7.0
16	4.0	3.0	8.0	6.0	11.0	8.0	10.0	8.0	13.0	7.0	10.0	7.0
17	3.0	3.0	9.0	6.0	11.0	7.0	9.0	8.0	13.0	7.0	12.0	8.0
18	6.0	3.0	9.0	6.0	9.0	7.0	9.0	7.0	13.0	7.0	12.0	9.0
19	6.0	4.0	8.0	6.0	11.0	7.0	10.0	6.0	13.0	7.0	12.0	9.0
20	6.0	3.0	8.0	6.0	12.0	7.0	12.0	8.0	13.0	7.0	9.0	8.0
21	6.0	4.0	10.0	7.0	12.0	7.0	11.0	8.0	13.0	7.0	10.0	7.0
22	6.0	4.0	9.0	7.0	12.0	8.0	12.0	8.0	13.0	7.0	10.0	7.0
23	7.0	4.0	7.0	7.0	12.0	7.0	13.0	7.0	13.0	7.0	10.0	7.0
24	6.0	4.0	7.0	7.0	11.0	8.0	13.0	8.0	13.0	7.0	10.0	7.0
25	7.0	5.0	8.0	7.0	11.0	8.0	13.0	9.0	13.0	7.0	11.0	8.0
26	7.0	5.0	10.0	7.0	11.0	9.0	13.0	8.0	13.0	7.0	11.0	9.0
27	7.0	5.0	9.0	7.0	13.0	8.0	13.0	9.0	13.0	7.0	10.0	8.0
28	8.0	5.0	9.0	7.0	12.0	8.0	14.0	10.0	13.0	7.0	10.0	7.0
29	6.0	5.0	9.0	7.0	12.0	9.0	15.0	11.0	13.0	9.0	8.0	7.0
30	6.0	5.0	8.0	7.0	11.0	9.0	13.0	9.0	13.0	11.0	10.0	8.0
31	---	---	9.0	7.0	---	---	14.0	9.0	13.0	9.0	---	---

09352900 VALLECITO CREEK NEAR BAYFIELD, CO--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
NOV					
01...	0930	27	2	.15	--
29...	1025	24	1	<.01	--
DEC					
28...	0910	24	1	.06	100
JAN					
29...	1015	1.8	<0	.00	--
FEB					
28...	0900	19	3	.15	33
MAR					
28...	0920	31	2	.17	50
MAY					
02...	1025	226	2	1.2	50
23...	1315	879	13	31	46
JUL					
02...	1230	808	11	24	44
AUG					
02...	0830	200	2	1.1	--

09353000 VALLECITO RESERVOIR NEAR BAYFIELD, CO

LOCATION.--Lat 37°23'00", long 107°34'30", in SW¼SW¼ sec.18, T.36 N., R.6 W., La Plata County, Hydrologic Unit 14080101, in gatehouse above outlet gates at Vallecito Dam on Los Pinos (Pine) River, 300 ft (91 m) left of spillway, 0.4 mi (0.6 km) upstream from Jack Creek, and 11 mi (18 km) northeast of Bayfield.

PERIOD OF RECORD.--April 1941 to current year.

REVISED RECORDS.--WSP 959: 1941. WSP 1513: 1956.

GAGE.--Water-stage recorder. Datum of gage is 7,580 ft (2,310.4 m) National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation); gage readings have been reduced to elevations NGVD.

REMARKS.--Reservoir is formed by earth and rockfill dam; dam completed in March 1941. Capacity of reservoir, 126,300 acre-ft (156 hm³) between elevations 7,580 ft (2,310.4 m), sill of outlet gate, and 7,665 ft (2,336.3 m), top of spillway gates. Dead storage, 3,395 acre-ft (4.19 hm³). Figures given are usable contents. Reservoir is used to store water for irrigation in Los Pinos (Pine) River basin.

COOPERATION.--Records furnished by Pine River Irrigation District.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 128,200 acre-ft (158 hm³) July 27, 1957, elevation, 7,665.72 ft (2,336.511 m); minimum, 1,520 acre-ft (1.87 hm³) Oct. 24, 25, 1944, elevation, 7,584.10 ft (2,311.634 m). No usable storage prior to April 1941.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 119,200 acre-ft (147 hm³) July 11, elevation 7,662.39 ft (2,335.496 m); minimum 25,040 acre-ft (30.9 hm³) Oct. 21, elevation, 7,616.10 ft (2,321.387 m).

MONTHEND ELEVATION NGVD AND CONTENTS AT 0900, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.	7,623.13	34,420	-26,620
Oct. 31.	7,616.97	26,100	-8,320
Nov. 30.	7,620.82	31,110	+5,010
Dec. 31.	7,623.51	34,980	+3,870
CAL YR 1978			+17,240
Jan. 31.	7,625.98	38,820	+3,840
Feb. 28.	7,627.80	41,810	+2,990
Mar. 31.	7,627.39	41,120	-690
Apr. 30.	7,626.00	38,850	-2,270
May 31.	7,643.86	73,520	+34,670
June 30.	7,661.90	117,940	+44,420
July 31.	7,661.64	117,250	-690
Aug. 31.	7,654.00	97,570	-19,680
Sept. 30.	7,637.71	60,320	-37,250
WTR YR 1979			+25,900

09353500 LOS PINOS RIVER NEAR BAYFIELD, CO
(LOCALLY KNOWN AS PINE RIVER)

LOCATION.--Lat 37°22'58", long 107°34'37", in SW¼ sec.18, T.36 N., R.6 W., La Plata County, Hydrologic Unit 14080101, on left side of outlet flume from Vallecito Reservoir, 0.4 mi (0.6 km) upstream from Jack Creek, 2.0 mi (3.2 km) upstream from Red Creek, and 11 mi (18 km) north of Bayfield.

DRAINAGE AREA.--270 mi² (700 km²), approximately.

PERIOD OF RECORD.--October 1927 to current year. Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder and concrete weir. Datum of gage is 7,582.54 ft (2,311.158 m), National Geodetic Vertical Datum of 1929 (levels by Water and Power Resources Service). See WSP 1713 or 1733 for history of changes prior to Aug. 18, 1956.

REMARKS.--Records good. Flow regulated by Vallecito Reservoir (station 09353000) since April 1941. Transmountain diversions above station by Weminuche Pass and Pine River-Weminuche Pass ditches (see elsewhere in this report).

COOPERATION.--Gage-height record is furnished by Pine River Irrigation District.

AVERAGE DISCHARGE (REVISED).--13 years (water years 1928-40), 345 ft³/s (9.770 m³/s), 250,000 acre-ft/yr (308 hm³/yr), prior to completion of Vallecito Reservoir, 39 years (water years 1941-79), 351 ft³/s (9.940 m³/s), 254,300 acre-ft/yr (314 hm³/yr), subsequent to completion of Vallecito Reservoir.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,800 ft³/s (391 m³/s) July 27, 1957, gage height, 12.2 ft (3.72 m), from floodmarks at supplementary gage, from rating curve extended above 2,500 ft³/s (71 m³/s), on basis of slope-area measurement of peak flow (result of automatic spillway gates releasing from Vallecito Reservoir); minimum daily, 3.2 ft³/s (0.091 m³/s) Feb. 11, 1951 (result of storage in Vallecito Reservoir); minimum daily prior to construction of Vallecito Reservoir, 38 ft³/s (1.08 m³/s) Dec. 21, 22, 1937.

EXTREMES OUTSIDE PERIOD OF RECORD.--Greatest flood since at least 1885 occurred Oct. 5, 1911.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,250 ft³/s (63.7 m³/s) June 28, gage height, 4.33 ft (1.320 m); minimum daily, 28 ft³/s (0.79 m³/s) Oct. 25 to Dec. 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	405	28	28	31	31	31	240	809	2140	2240	720	748
2	405	28	28	31	31	31	240	809	2140	2240	720	792
3	401	28	28	31	31	31	318	809	2140	2240	720	821
4	378	28	28	31	31	31	361	804	2140	2070	720	815
5	350	28	28	31	31	31	361	804	2140	1740	720	815
6	341	28	28	31	31	31	434	651	2140	1390	720	809
7	305	28	28	31	31	65	487	522	2180	1260	720	804
8	279	28	28	31	31	90	487	527	2190	1260	715	804
9	275	28	28	31	31	90	487	532	2200	1260	715	798
10	272	28	28	31	31	90	487	532	2200	1270	710	798
11	268	28	28	31	31	90	487	536	2050	1270	710	792
12	268	28	28	31	31	90	478	536	1970	1270	710	786
13	268	28	28	31	31	130	478	536	1850	1270	751	781
14	268	28	28	31	31	158	478	536	1970	1180	775	781
15	258	28	28	31	31	158	474	680	2000	1130	775	775
16	250	28	28	31	31	158	474	903	1860	1040	775	770
17	247	28	28	31	31	158	474	1050	1460	1130	770	770
18	244	28	28	31	31	158	474	1090	1290	928	770	770
19	240	28	28	31	31	158	478	1090	1300	896	770	764
20	151	28	28	31	31	158	478	1270	1300	804	754	758
21	80	28	28	31	31	158	478	1540	1300	748	754	758
22	68	28	28	31	31	158	478	1650	1630	748	754	758
23	54	28	28	31	31	158	542	1870	1960	748	758	753
24	35	28	28	31	31	158	580	2000	2070	748	758	753
25	28	28	28	31	31	158	584	2000	2070	714	758	748
26	28	28	30	31	31	158	589	2010	2080	710	753	742
27	28	28	30	31	31	158	589	2020	2080	720	753	736
28	28	28	30	31	31	158	589	2050	2170	720	753	736
29	28	28	30	31	---	204	594	2090	2240	720	748	731
30	28	28	30	31	---	240	728	2100	2240	720	748	731
31	28	---	30	31	---	240	---	2120	---	720	748	---
TOTAL	6306	840	880	961	868	3885	14426	36476	58510	35904	23055	23197
MEAN	203	28.0	28.4	31.0	31.0	125	481	1177	1950	1158	744	773
MAX	405	28	30	31	31	240	728	2120	2240	2240	775	821
MIN	28	28	28	31	31	31	240	522	1290	710	710	731
AC-FT	12510	1670	1750	1910	1720	7710	28610	72350	116100	71220	45730	46010

CAL YR 1978 TOTAL 100030 MEAN 274 MAX 1320 MIN 21 AC-FT 198400
WTR YR 1979 TOTAL 205308 MEAN 562 MAX 2240 MIN 28 AC-FT 407200

NOTE.--NO GAGE-HEIGHT RECORD JAN. 4 TO MAR. 12.

09354500 LOS PINOS RIVER AT LA BOCA, CO

LOCATION.--Lat 37°00'34", long 107°35'56", in NE¼NW¼ sec.22, T.32 N., R.7 W., La Plata County, Hydrologic Unit 14080101, on downstream end of right abutment of the Denver & Rio Grande Western Railroad Co. bridge, at southeast edge of La Boca, 0.1 mi (0.2 km) upstream from Spring Creek, and 13 mi (21 km) upstream from mouth.

DRAINAGE AREA.--510 mi² (1,320 km²), approximately.

PERIOD OF RECORD.--October 1950 to current year. Monthly discharge only for some periods, published in WSP 1733.

GAGE.--Water-stage recorder. Datum of gage is 6,143.58 ft (1,872.563 m), National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter period, which are poor. Flow regulated by Vallecito Reservoir (station 09353000) 24 mi (39 km) upstream since April 1941. Diversions for irrigation of about 33,000 acres (130 km²) above station. Several observations of water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--29 years, 210 ft³/s (5.947 m³/s), 152,100 acre-ft/yr (188 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,400 ft³/s (181 m³/s) July 27, 1957, gage height, 8.95 ft (2.728 m), from rating curve extended above 5,100 ft³/s (140 m³/s); minimum daily, 6.1 ft³/s (0.17 m³/s) May 1, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--A major flood occurred Oct. 5, 1911, at this location.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,190 ft³/s (62.0 m³/s) May 29, gage height, 6.50 ft (1.981 m); minimum daily, 48 ft³/s (1.36 m³/s) Dec. 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	134	70	63	54	65	68	742	1650	1960	1780	158	316
2	122	70	79	52	64	70	657	1630	1910	1850	151	323
3	127	258	71	49	66	72	643	1540	1840	1850	152	377
4	133	126	57	50	68	68	774	1430	1840	1800	144	370
5	119	89	62	54	60	66	933	1430	1830	1480	133	359
6	119	76	68	56	60	70	1150	1360	1820	1170	138	348
7	122	68	60	62	60	125	1390	1200	1800	990	135	347
8	119	65	54	62	58	140	1460	1160	1810	969	142	352
9	105	62	50	66	56	165	1430	1060	1830	958	148	344
10	86	64	55	70	58	189	1570	997	1820	939	154	347
11	86	133	56	64	56	157	1160	891	1740	932	175	344
12	97	266	58	66	60	177	929	825	1570	926	213	343
13	94	183	60	68	62	292	870	790	1430	913	218	338
14	93	111	57	64	62	453	1020	765	1510	861	233	351
15	98	96	55	64	68	577	1290	837	1520	738	412	375
16	98	84	52	64	70	650	1550	1120	1470	702	545	383
17	104	76	54	62	72	631	1770	1350	1240	580	420	403
18	108	72	56	63	73	581	1740	1330	960	540	355	381
19	109	67	58	64	72	569	1860	1310	942	480	430	371
20	120	64	54	62	76	607	1560	1390	947	450	377	365
21	149	60	51	58	76	678	1500	1670	923	292	350	374
22	199	62	50	64	72	645	1550	1790	1040	274	342	381
23	133	61	50	70	70	699	1670	1830	1390	264	330	368
24	135	63	51	62	70	779	1780	1980	1570	249	339	364
25	173	241	52	68	68	873	1610	1980	1590	214	345	362
26	97	114	48	70	68	982	1540	2010	1590	152	350	367
27	77	87	52	68	72	915	1440	2090	1590	156	346	370
28	77	72	54	68	70	755	1500	2090	1620	166	332	377
29	71	63	56	65	---	1140	1560	2110	1760	186	312	370
30	71	61	55	64	---	888	1530	2090	1780	176	331	370
31	68	---	56	64	---	964	---	2030	---	171	331	---
TOTAL	3443	2984	1754	1937	1852	15045	40178	45735	46642	23208	8621	10841
MEAN	111	99.5	56.6	62.5	66.1	485	1339	1475	1555	749	278	361
MAX	199	266	79	70	76	1140	1860	2110	1960	1850	545	403
MIN	68	60	48	49	56	66	643	765	923	152	133	316
AC-FT	6830	5920	3480	3840	3670	29840	79690	90720	92510	46030	17100	21500

CAL YR 1978 TOTAL 47435 MEAN 130 MAX 840 MIN 26 AC-FT 94090
WTR YR 1979 TOTAL 202240 MEAN 554 MAX 2110 MIN 48 AC-FT 401100

09355000 SPRING CREEK AT LA BOCA, CO

LOCATION.--Lat 37°00'40", long 107°35'47", in SE¼SW¼ sec.15, T.32 N., R.7 W., La Plata County, Hydrologic Unit 14080101, on right bank in an excavated channel, 0.2 mi (0.3 km) upstream from mouth, and 0.2 mi (0.3 km) east of La Boca.

DRAINAGE AREA.--58 mi² (150 km²), approximately.

PERIOD OF RECORD.--October 1950 to current year. Monthly discharge only for some periods, published in WSP 1733.

GAGE.--Water-stage recorder. Altitude of gage is 6,160 ft (1,878 m), from topographic map.

REMARKS.--Records good except those for winter period, which are poor. Part of flow is return waste from irrigation.

AVERAGE DISCHARGE.--29 years, 29.8 ft³/s (0.844 m³/s), 21,590 acre-ft/yr (26.6 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,980 ft³/s (56.1 m³/s) Sept. 6, 1970, gage height, 4.62 ft (1.408 m), from rating curve extended above 160 ft³/s (4.53 m³/s), on basis of field estimate of peak flow; maximum gage height, 5.98 ft (1.823 m) Mar. 9, 1960 (backwater from ice); minimum daily discharge, 0.6 ft³/s (0.017 m³/s) Nov. 27, 1959.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 180 ft³/s (5.1 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Mar. 29	0445	*546	15.5	2.80	0.853	Aug. 15	2315	215	6.09	1.73	0.527

Minimum daily discharge, 3.0 ft³/s (0.08 m³/s) Dec. 21, 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	49	6.6	5.2	3.6	3.3	5.0	50	27	59	70	57	64
2	48	6.7	7.4	3.5	4.6	5.4	30	26	59	73	59	66
3	48	54	10	3.7	3.9	5.4	25	21	61	75	59	75
4	51	14	16	3.6	3.3	5.0	20	17	61	72	57	75
5	48	8.0	9.9	3.8	3.0	4.8	20	21	60	70	59	72
6	41	7.2	6.8	4.4	3.4	5.2	34	49	59	68	60	68
7	38	6.8	4.1	4.2	3.5	7.5	50	30	54	67	60	70
8	39	6.7	4.1	3.8	3.6	10	55	27	55	68	61	71
9	40	6.7	4.2	3.7	3.7	12	57	33	59	70	61	68
10	41	6.6	4.0	3.7	3.7	14	62	38	58	68	62	70
11	38	18	4.0	3.8	3.8	11	40	35	58	68	63	69
12	38	48	3.8	4.2	3.9	50	20	31	58	67	62	67
13	35	22	4.0	4.6	3.9	70	15	32	56	68	63	64
14	35	10	3.8	4.1	4.0	86	23	30	58	67	74	68
15	36	8.9	3.5	3.5	4.8	126	46	25	65	67	112	72
16	29	7.9	3.7	4.0	5.2	163	58	41	62	67	146	76
17	22	7.2	4.0	4.6	5.4	128	66	41	63	67	96	81
18	22	6.7	4.9	5.6	5.4	82	64	41	60	68	95	79
19	22	6.4	4.5	5.7	5.5	92	63	39	60	69	92	77
20	22	5.7	3.2	4.8	5.6	124	45	46	60	67	93	81
21	33	5.0	3.0	4.0	5.6	209	43	52	59	65	92	75
22	30	6.0	3.1	4.1	5.2	149	47	44	59	67	89	75
23	11	5.5	3.1	3.5	5.2	164	51	48	63	66	85	77
24	15	5.7	3.2	4.0	5.0	185	49	49	66	65	70	77
25	32	54	3.2	3.6	5.0	192	40	61	66	63	70	70
26	8.2	10	3.0	4.2	4.9	195	35	71	66	60	72	71
27	6.7	6.6	3.4	4.0	5.4	138	30	73	64	63	70	72
28	6.6	5.4	4.4	3.3	5.2	109	33	59	63	62	66	73
29	6.4	6.3	4.0	3.4	---	263	33	60	64	65	62	72
30	6.7	6.4	4.3	3.6	---	89	29	56	67	63	68	70
31	6.7	---	3.4	3.1	---	82	---	58	---	60	68	---
TOTAL	904.3	375.0	149.2	123.7	125.0	2781.3	1233	1281	1822	2075	2333	2167
MEAN	29.2	12.5	4.81	3.99	4.46	89.7	41.1	41.3	60.7	66.9	74.3	72.2
MAX	51	54	16	5.7	5.6	263	66	73	67	75	146	81
MIN	6.4	5.0	3.0	3.1	3.0	4.8	15	17	54	60	57	64
AC-FT	1790	744	296	245	248	5520	2450	2540	3610	4120	4570	4300

CAL YR 1978 TOTAL 10282.5 MEAN 28.2 MAX 96 MIN 1.8 AC-FT 20400
WTR YR 1979 TOTAL 15339.5 MEAN 42.0 MAX 263 MIN 3.0 AC-FT 30430

09357500 ANIMAS RIVER AT HOWARDSVILLE, CO

LOCATION.--Lat 37°49'59", long 107°35'56", San Juan County, Hydrologic Unit 14080104, on right bank 1,000 ft (300 m) downstream from bridge on State Highway 110, 0.4 mi (0.6 km) southwest of Howardsville, and 0.4 mi (0.6 km) downstream from Cunningham Creek.

DRAINAGE AREA.--55.9 mi² (145 km²).

PERIOD OF RECORD.--October 1935 to current year. Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder. Datum of gage is 9,616.98 ft (2,931.256 m), National Geodetic Vertical Datum of 1929. Prior to Aug. 18, 1939, at datum 1.00 ft (0.305 m) higher.

REMARKS.--Records good except those for winter period, which are fair. No diversion above station.

COOPERATION.--Records collected and computed by Colorado Division of Water Resources and reviewed by Geological Survey.

AVERAGE DISCHARGE.--44 years, 102 ft³/s (2.889 m³/s), 73,900 acre-ft/yr (91.1 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,980 ft³/s (56.1 m³/s) June 18, 1949, gage height, 4.35 ft (1.329 m), from rating curve extended above 950 ft³/s (27 m³/s); maximum gage height, 5.24 ft (1.597 m) Feb. 18, 1958 (backwater from snowslide); minimum daily discharge, 9.0 ft³/s (0.25 m³/s) Jan. 10, 1957, Feb. 15, Mar. 9, 1964, Feb. 13, 1965.

EXTREMES OUTSIDE PERIOD OF RECORD.--Greatest flood since at least 1885 occurred Oct. 5, 1911.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,130 ft³/s (32.0 m³/s) at 2230 June 15, gage height, 3.53 ft (1.076 m), only peak above base of 700 ft³/s (20 m³/s); minimum daily, 10 ft³/s (0.28 m³/s) Jan. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	18	15	13	14	14	14	62	357	618	140	49
2	22	18	15	10	14	14	14	63	396	588	130	47
3	22	19	16	14	14	14	14	63	455	510	120	46
4	22	18	16	15	14	14	14	68	558	396	114	44
5	22	19	16	15	14	14	14	86	637	388	110	43
6	21	18	14	15	14	14	14	110	833	406	136	40
7	21	18	13	15	14	14	15	118	856	420	102	39
8	21	18	11	13	14	14	15	104	644	455	100	37
9	20	17	12	15	14	14	16	88	406	420	95	37
10	20	17	14	15	14	14	16	74	317	388	97	37
11	20	18	16	15	14	14	16	66	345	401	95	37
12	21	17	16	15	14	14	15	64	500	383	151	37
13	20	18	16	15	14	14	15	73	742	370	124	35
14	19	17	16	14	14	14	15	102	812	365	138	38
15	19	18	16	15	14	14	18	145	819	329	98	37
16	19	18	16	15	14	14	22	180	833	289	95	37
17	19	18	16	15	14	14	24	188	728	274	90	34
18	19	17	16	15	14	14	29	244	528	254	81	33
19	19	17	15	15	14	14	30	313	351	241	80	32
20	19	17	16	14	14	14	30	340	309	229	83	33
21	21	17	16	14	14	14	33	360	361	220	76	33
22	22	17	16	14	14	14	38	380	495	226	59	32
23	22	16	16	14	14	14	45	400	600	217	56	30
24	22	16	16	14	14	14	49	380	630	208	53	30
25	22	16	16	14	13	14	47	350	651	208	53	30
26	20	16	16	14	14	14	50	400	679	196	52	30
27	19	16	16	14	13	14	52	460	700	182	58	30
28	19	16	16	14	13	14	54	550	679	172	54	29
29	18	16	16	14	---	14	54	540	658	178	51	29
30	18	16	15	14	---	14	56	612	606	165	49	29
31	18	---	15	14	---	14	---	420	---	150	51	---
TOTAL	628	517	475	442	389	434	838	7403	17505	9846	2791	1075
MEAN	20.3	17.2	15.3	14.3	13.9	14.0	27.9	239	584	318	90.0	35.8
MAX	22	19	16	15	14	14	56	612	856	618	151	49
MIN	18	16	11	10	13	14	14	62	309	150	49	29
AC-FT	1250	1030	942	877	772	861	1660	14680	34720	19530	5540	2130

CAL YR 1978 TOTAL 38216 MEAN 105 MAX 904 MIN 10 AC-FT 75800
WTR YR 1979 TOTAL 42343 MEAN 116 MAX 856 MIN 10 AC-FT 83990

09361000 HERMOSA CREEK NEAR HERMOSA, CO

LOCATION.--Lat 37°25'19", long 107°50'40", in NE¼NW¼ sec.3, T.36 N., R.9 W., La Plata County, Hydrologic Unit 14080104, on right bank 20 ft (6 m) downstream from private bridge, 0.8 mi (1.3 km) northwest of Hermosa, and 2.2 mi (3.5 km) upstream from mouth.

DRAINAGE AREA.--172 mi² (445 km²).

PERIOD OF RECORD.--November and December 1911 (gage heights and discharge measurements only), January 1912 to September 1914, October 1919 to September 1928, October 1939 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1313: 1927(M).

GAGE.--Water-stage recorder. Datum of gage is 6,705.88 ft (2,043.952 m), National Geodetic Vertical Datum of 1929. Prior to September 1914, nonrecording gage, and April 1920 to September 1928, water-stage recorder (nonrecording gage for short periods), within 0.5 mi (0.8 km) at different datums.

REMARKS.--Records good except those for winter period, which are poor. Diversions for irrigation of a few hay meadows above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--51 years (water years 1913-14, 1920-28, 1940-79), 136 ft³/s (3.852 m³/s), 98,530 acre-ft/yr (121 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,980 ft³/s (84.4 m³/s) May 12, 1941, gage height, 6.02 ft (1.835 m); maximum gage height, 8.50 ft (2.591 m) Sept. 12, 1927, from floodmarks, site and datum then in use; minimum daily discharge, 4.0 ft³/s (0.11 m³/s) Dec. 9, 1956.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 800 ft³/s (23 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Apr. 23	2330	1100	31.2	3.45	1.052	June 7	0200	1700	48.1	4.28	1.305
May 7	0400	1160	32.8	3.55	1.082	June 14	0200	1240	35.1	3.65	1.112
May 28	0100	*2050	58.1	4.65	1.417						

Minimum daily discharge, 13 ft³/s (0.37 m³/s) Oct. 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	17	20	16	20	26	56	734	1200	408	57	43
2	14	18	21	17	20	27	55	752	1060	416	54	41
3	14	21	20	17	19	26	53	692	1020	361	53	40
4	14	20	19	17	19	25	51	615	1120	306	51	38
5	14	19	19	18	19	25	52	758	1190	263	58	37
6	14	20	20	18	19	28	63	990	1490	244	57	36
7	13	19	20	18	20	30	103	1120	1470	232	51	35
8	14	18	20	18	20	41	173	990	1270	218	51	34
9	15	18	20	19	20	53	126	734	990	200	54	33
10	15	17	20	18	20	52	193	585	806	186	55	30
11	15	30	20	18	20	55	152	475	836	173	52	30
12	15	60	20	17	22	67	124	412	990	160	52	29
13	14	34	20	17	22	83	110	421	1120	150	56	27
14	14	30	20	16	22	87	124	550	1140	142	53	28
15	14	25	20	18	22	80	246	788	1100	134	57	30
16	14	22	20	19	23	76	485	976	990	124	82	29
17	14	22	20	19	24	72	647	1010	836	122	71	28
18	14	20	20	19	24	63	698	1090	686	132	53	27
19	14	20	19	20	24	61	752	1430	580	126	53	26
20	14	20	19	19	24	61	664	1500	520	122	52	27
21	19	19	19	19	24	57	664	1530	525	124	56	30
22	26	20	18	19	24	52	752	1700	550	108	52	29
23	23	19	18	20	24	49	902	1740	565	101	50	27
24	24	19	17	20	24	50	955	1660	560	95	48	25
25	27	21	17	20	24	52	764	1560	545	89	46	25
26	22	19	17	20	24	59	710	1620	535	86	45	24
27	19	20	17	19	24	64	680	1880	515	83	46	24
28	18	19	18	20	25	65	788	1850	490	80	45	24
29	18	18	18	20	---	63	860	1820	444	77	43	24
30	18	19	17	21	---	59	746	1720	408	72	47	23
31	18	---	16	20	---	62	---	1510	---	68	48	---
TOTAL	517	663	589	576	616	1670	12748	35212	25561	5202	1758	904
MEAN	16.7	22.1	19.0	18.6	22.0	53.9	425	1136	852	168	56.7	30.1
MAX	27	60	21	21	25	87	955	1880	1490	416	82	43
MIN	13	17	16	16	19	26	51	412	408	68	43	23
AC-FT	1030	1320	1170	1140	1220	3310	25290	69840	50700	10320	3490	1790

CAL YR 1978 TOTAL 43251 MEAN 118 MAX 941 MIN 10 AC-FT 85790
WTR YR 1979 TOTAL 86016 MEAN 236 MAX 1880 MIN 13 AC-FT 170600

09361500 ANIMAS RIVER AT DURANGO, CO

LOCATION.--Lat 37°16'45", long 107°52'47", in SW¼SW¼ sec.20, T.35 N., R.9 W., La Plata County, Hydrologic Unit 14080104, on left bank at Western Colorado Power Co.'s plant at Durango, 0.8 mi (1.3 km) upstream from Lightner Creek.

DRAINAGE AREA.--692 mi² (1,792 km²).

PERIOD OF RECORD.--June to December 1895, April 1896 to December 1898, April 1899 to December 1900, March to May 1901, April to November 1902, March to April 1903 (gage heights only, erroneously stated as discredited in WSP 1563), May to October 1903, July 1904 to December 1905, January to December 1910 (gage heights only), January to September 1911, January 1912 to current year. Monthly or yearly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 764: Drainage area. WSP 929: 1927(M). WSP 1243: 1911, 1918(M). WSP 1563: 1911-25 (monthly figures only).

GAGE.--Water-stage recorder. Datum of gage is 6,501.57 ft (1,981.679 m), National Geodetic Vertical Datum of 1929. See WSP 1713 or 1733 for history of changes prior to Mar. 2, 1921.

REMARKS.--Records good. Diversions for irrigation of about 4,000 acres (16 km²) above station. Natural regulation by many lakes and regulation for power above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--74 years (water years 1897-1900, 1905, 1911-79), 836 ft³/s (23.68 m³/s), 605,700 acre-ft/yr (747 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 25,000 ft³/s (708 m³/s) Oct. 5, 1911, gage height, 11 ft (3.4 m), present site and datum, from rating curve extended above 13,000 ft³/s (370 m³/s); minimum daily, 94 ft³/s (2.66 m³/s) Mar. 2, 1913.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1885, that of Oct. 5, 1911.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 4,000 ft³/s (110 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
May 28	1030	*7,810	221	7.27	2.216	June 16	1500	6,580	186	6.71	2.045
June 7	1200	7,770	220	7.25	2.210	June 29	0900	4,480	127	5.72	1.743

Minimum daily discharge, 161 ft³/s (4.56 m³/s) Oct. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	218	182	192	192	212	200	380	2040	4740	3740	880	436
2	206	180	203	210	210	209	356	2070	4210	3970	830	394
3	198	192	190	210	210	209	338	2020	4210	3740	770	380
4	195	190	190	200	210	203	338	1810	4700	3180	730	362
5	192	185	192	200	210	198	350	2090	5200	2780	682	356
6	192	185	206	203	200	198	394	2600	6320	2580	673	332
7	190	185	200	198	200	212	490	3140	7260	2600	682	320
8	182	182	200	190	200	230	646	2790	6710	2770	664	310
9	182	182	200	190	195	258	870	2210	4940	2670	655	295
10	178	178	200	195	188	266	870	1790	3580	2570	646	285
11	175	192	200	198	188	258	750	1490	3540	2490	619	275
12	173	262	224	209	188	270	637	1310	4220	2320	720	275
13	169	262	206	206	195	305	586	1260	5370	2230	920	270
14	169	224	192	200	200	332	628	1520	6120	2190	760	270
15	190	215	192	190	200	350	810	2150	6100	2120	710	270
16	192	206	200	198	200	356	1250	2740	6270	1880	780	266
17	171	198	180	198	198	350	1780	2920	5660	1840	870	266
18	163	192	203	200	188	344	1970	3130	4640	1690	750	275
19	161	192	190	200	185	326	2150	4040	3400	1600	682	262
20	163	190	180	190	198	350	1880	4500	2770	1450	673	266
21	171	190	182	190	206	356	1830	4480	2970	1420	673	270
22	180	190	180	188	206	326	2070	5140	3580	1420	610	280
23	192	190	180	180	200	332	2400	5720	3990	1400	562	262
24	198	190	180	200	200	326	2720	5200	4150	1280	546	258
25	198	206	180	198	212	332	2280	4760	3950	1300	522	258
26	198	198	180	200	215	356	2070	4920	4040	1210	506	258
27	192	192	180	200	218	387	1940	6760	3930	1120	506	258
28	188	185	188	200	209	387	2020	7480	4130	1050	466	258
29	185	185	190	190	---	401	2290	7000	4110	1040	443	250
30	185	188	195	200	---	387	2090	7200	3740	1060	443	242
31	185	---	192	210	---	394	---	6030	---	930	474	---
TOTAL	5731	5888	5967	6133	5641	9408	39183	112310	138550	63640	20447	8759
MEAN	185	196	192	198	201	303	1306	3623	4618	2053	660	292
MAX	218	262	224	210	218	401	2720	7480	7260	3970	920	436
MIN	161	178	180	180	185	198	338	1260	2770	930	443	242
AC-FT	11370	11680	11840	12160	11190	18660	77720	222800	274800	126200	40560	17370

CAL YR 1978 TOTAL 278426 MEAN 763 MAX 4620 MIN 161 AC-FT 552300
WTR YR 1979 TOTAL 421657 MEAN 1155 MAX 7480 MIN 161 AC-FT 836400

09363050 FLORIDA RIVER BELOW FLORIDA FARMERS DITCH, NEAR DURANGO, CO

LOCATION.--Lat 37°17'42", long 107°47'28", in SW¼SW¼ sec.18, T.35 N., R.8 W., La Plata County, Hydrologic Unit 14080104, on right bank 30 ft (9 m) downstream from diversion dam for Florida Farmers ditch and 4.0 mi (6.4 km) east of Riverview School in Durango.

DRAINAGE AREA.--108 mi² (280 km²).

PERIOD OF RECORD.--October 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 7,065.35 ft (2,153.519 m), National Geodetic Vertical Datum of 1929 (levels by Water and Power Resources Service).

REMARKS.--Records good except those for winter period, which are fair. Flow regulated by Lemon Reservoir, capacity, 40,100 acre-ft (49.4 hm³). Diversions above station for irrigation above and below station and for municipal supply of Durango. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--12 years, 37.8 ft³/s (1.070 m³/s), 27,390 acre-ft/yr (33.8 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,100 ft³/s (31.2 m³/s) May 19, 1973, gage height, 5.70 ft (1.737 m); minimum daily, 0.70 ft³/s (0.020 m³/s) Oct. 14, 1968, Oct. 17, 1973.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 828 ft³/s (23.4 m³/s) June 7, gage height, 5.12 ft (1.561 m); minimum daily, 1.0 ft³/s (0.028 m³/s) Aug. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.2	7.2	5.5	8.0	10	15	33	318	483	501	2.0	5.0
2	2.2	7.2	11	8.0	10	14	30	320	459	471	1.8	5.0
3	2.2	10	6.8	8.0	10	13	29	290	435	480	1.8	5.0
4	2.2	8.7	7.0	8.0	10	13	29	268	414	414	1.8	4.8
5	2.2	7.9	9.5	8.5	10	13	32	186	489	312	1.2	5.0
6	2.2	7.5	8.3	8.0	10	14	44	236	646	182	1.0	5.8
7	2.2	7.5	7.9	8.0	11	16	69	350	800	77	2.3	5.8
8	2.0	7.2	8.0	8.0	11	20	99	345	784	113	5.5	7.0
9	1.8	7.0	8.0	8.0	11	22	112	300	784	160	5.5	7.0
10	1.5	7.2	8.5	8.0	10	22	109	274	780	138	5.5	7.0
11	2.0	11	9.0	8.5	10	26	110	262	764	103	5.5	7.0
12	4.1	20	9.5	8.5	10	26	100	254	760	90	5.8	7.0
13	4.8	14	9.5	8.5	10	29	97	252	476	114	5.2	7.0
14	4.6	11	9.0	8.0	9.5	30	110	266	124	78	4.8	7.0
15	4.6	9.5	8.5	8.0	9.5	30	166	284	186	69	4.8	7.0
16	4.1	10	8.5	7.5	9.5	31	240	295	543	54	4.6	7.0
17	4.1	9.9	8.5	8.0	10	30	300	310	615	23	4.3	6.8
18	3.9	9.1	8.5	9.0	10	28	378	305	470	5.5	4.3	6.8
19	3.5	8.7	8.0	9.0	10	27	420	328	250	2.7	4.3	6.8
20	3.5	8.7	7.5	9.0	10	26	360	342	152	2.4	4.3	6.8
21	3.2	8.7	7.0	9.0	10	26	360	397	264	2.1	4.1	6.8
22	3.0	9.1	6.5	9.0	10	25	396	450	423	2.4	3.9	6.8
23	2.8	8.7	6.5	9.5	10	23	429	491	510	3.0	2.8	6.8
24	3.0	10	6.5	10	11	25	411	528	517	2.7	3.7	6.2
25	3.0	13	6.0	9.5	12	27	355	510	552	2.7	5.2	3.9
26	4.9	11	6.0	9.0	13	33	328	495	552	3.0	5.0	3.7
27	8.3	6.8	6.0	9.5	13	37	310	501	580	3.8	5.0	3.5
28	7.9	4.8	6.0	10	13	35	352	501	590	2.4	5.0	3.2
29	7.9	4.6	6.0	10	---	36	345	528	566	2.2	5.0	3.0
30	7.5	4.6	6.5	10	---	34	312	528	556	2.1	5.2	3.0
31	7.5	---	7.0	10	---	37	---	489	---	2.1	5.2	---
TOTAL	118.9	270.6	237.0	270.0	293.5	783	6465	11203	15524	3418.1	126.4	173.5
MEAN	3.84	9.02	7.65	8.71	10.5	25.3	216	361	517	110	4.08	5.78
MAX	8.3	20	11	10	13	37	429	528	800	501	5.8	7.0
MIN	1.5	4.6	5.5	7.5	9.5	13	29	186	124	2.1	1.0	3.0
AC-FT	236	537	470	536	582	1550	12820	22220	30790	6780	251	344

CAL YR 1978 TOTAL 4071.6 MEAN 11.2 MAX 48 MIN 1.5 AC-FT 8080
WTR YR 1979 TOTAL 38883.0 MEAN 107 MAX 800 MIN 1.0 AC-FT 77120

09363100 SALT CREEK NEAR OXFORD, CO

LOCATION.--Lat 37°08'23", long 107°45'10", in NE¼NE¼ sec.6, T.33 N., R.8 W., La Plata County, Hydrologic Unit 14080104, on right bank 2.9 mi (4.7 km) upstream from mouth, 3.0 mi (4.8 km) southwest of Oxford, and 11 mi (18 km) southeast of Durango.

DRAINAGE AREA.--16.7 mi^2 (43.3 km^2).

PERIOD OF RECORD.--October 1956 to September 1963, October 1967 to current year.

REVISED RECORDS.--WSP 1925: 1960.

GAGE.--Water-stage recorder. Altitude of gage is 6,470 ft (1,972 m), from topographic map. Prior to October 1967, at site 0.2 mi (0.3 km) upstream at different datum.

REMARKS.--Records good except those for winter period, which are poor. Most of flow is return flow from areas irrigated by water imported from Los Pinos River. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--19 years, 12.0 ft^3/s (0.340 m^3/s), 8,690 acre-ft/yr (10.7 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 811 ft^3/s (23.0 m^3/s) Oct. 19, 1972, gage height, 5.24 ft (1.597 m), from rating curve extended above 200 ft^3/s (5.7 m^3/s), on basis of slope-area measurements at gage heights 3.54 and 5.24 ft (1.079 and 1.597 m); no flow at times in 1959-60, 1962, 1977, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 276 ft^3/s (7.82 m^3/s) Apr. 5, gage height, 4.16 ft (1.268 m) (backwater from ice jam); minimum daily, 0.50 ft^3/s (0.014 m^3/s) Feb. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	.60	2.0	.70	.80	1.7	92	1.7	26	32	20	26
2	16	.60	3.9	.60	.70	1.7	69	1.6	19	39	16	23
3	14	45	3.0	.60	.60	2.3	63	1.6	27	34	14	25
4	16	8.2	.70	.70	.60	2.4	82	1.5	31	34	17	24
5	15	2.7	.70	.70	.50	2.3	147	1.3	28	36	19	26
6	15	1.9	.70	.80	.60	2.0	170	1.2	26	36	19	27
7	16	1.6	.70	.80	.60	2.5	148	1.1	27	27	20	29
8	11	1.9	.70	.60	.60	3.5	98	1.2	32	24	22	32
9	6.7	2.3	.60	.70	.60	9.5	54	1.7	32	20	23	29
10	4.0	2.2	.60	.80	.60	11	163	2.7	32	20	25	30
11	4.0	3.6	.60	.80	.70	10	59	2.3	25	20	19	31
12	5.1	35	.60	.80	.80	11	10	1.4	23	22	22	30
13	5.5	13	.60	.80	.90	14	8.2	1.2	19	20	23	31
14	5.7	5.3	.60	.70	1.2	17	11	.88	16	19	26	19
15	5.7	3.9	.60	.60	1.2	22	8.6	.88	17	18	52	15
16	5.0	3.5	.60	.60	1.3	26	4.4	.79	19	18	87	20
17	4.2	3.1	.60	.60	1.6	24	3.4	2.5	19	19	58	22
18	4.6	2.5	.60	.70	1.6	17	2.8	18	19	30	36	19
19	4.4	1.9	.60	.70	1.6	17	2.3	1.9	16	34	38	20
20	4.8	1.9	.60	.70	1.4	16	2.4	2.7	15	31	35	21
21	12	1.9	.70	.80	1.3	22	1.9	3.1	18	25	44	23
22	16	2.2	.70	.80	1.3	18	1.9	3.5	19	22	50	23
23	8.3	2.2	.70	.90	1.3	14	1.9	6.1	21	20	50	24
24	11	2.6	.70	.90	1.2	18	1.8	13	23	19	33	24
25	14	35	.70	.90	1.2	24	1.8	16	25	18	28	23
26	4.0	8.5	.70	.90	1.2	28	1.7	19	27	21	27	20
27	2.6	3.7	.70	.80	1.4	46	1.6	47	30	27	26	20
28	2.2	2.5	.70	.70	1.5	100	1.5	35	28	27	24	19
29	1.2	2.0	.70	.70	---	171	1.5	41	30	18	24	19
30	.88	2.2	.70	.70	---	136	1.5	37	30	16	26	20
31	.65	---	.70	.70	---	133	---	32	---	18	28	---
TOTAL	255.53	203.50	27.30	22.80	28.90	922.9	1215.2	300.85	719	765	951	714
MEAN	8.24	6.78	.88	.74	1.03	29.8	40.5	9.70	24.0	24.7	30.7	23.8
MAX	20	45	3.9	.90	1.6	171	170	47	32	39	87	32
MIN	.65	.60	.60	.60	.50	1.7	1.5	.79	15	16	14	15
AC-FT	507	404	54	45	57	1830	2410	597	1430	1520	1890	1420

CAL YR 1978 TOTAL 3859.66 MEAN 10.6 MAX 84 MIN .04 AC-FT 7660
WTR YR 1979 TOTAL 6125.98 MEAN 16.8 MAX 171 MIN .50 AC-FT 12150

NOTE.--NO GAGE-HEIGHT RECORD DEC. 8 TO FEB. 15.

09363200 FLORIDA RIVER AT BONDAD, CO

LOCATION.--Lat 37°03'24", long 107°52'09", in NE¼SW¼ sec.31, T.33 N., R.9 W., La Plata County, Hydrologic Unit 14080104, on left bank 40 ft (12 m) downstream from BIA bridge, 0.6 mi (1.0 km) upstream from mouth, 0.7 mi (1.1 km) northeast of Bondad, and 15 mi (24 km) south of Durango.

DRAINAGE AREA.--221 mi^2 (572 km^2).

PERIOD OF RECORD.--October 1956 to September 1963, October 1967 to current year.

REVISED RECORDS.--WSP 1713: 1958.

GAGE.--Water-stage recorder. Altitude of gage is 6,000 ft (1,829 m), from topographic map. Prior to Sept. 11, 1958, at site 300 ft (91 m) upstream at datum 2.39 ft (0.728 m) higher.

REMARKS.--Records good except those for winter period, which are poor. Diversion for irrigation of about 20,000 acres (81 km^2) above station. Flow regulated by Lemon Reservoir, capacity, 40,100 acre-ft (49.4 hm^3) since November 1963. Most of flow is return flow from irrigated areas. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--7 years (water years 1957-63), 78.8 ft^3/s (2.203 m^3/s), 56,370 acre-ft/yr (69.5 hm^3/yr), prior to completion of Lemon Dam; 12 years (water years 1968-79), 70.4 ft^3/s (1.994 m^3/s), 51,000 acre-ft/yr (62.9 hm^3/yr), subsequent to completion of Lemon Dam.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,640 ft^3/s (46.4 m^3/s) Oct. 19, 1972, gage height, 6.30 ft (1.920 m), from rating curve extended above 1,100 ft^3/s (31 m^3/s), on basis of slope-area measurement of peak flow; minimum daily, 4.6 ft^3/s (0.13 m^3/s) July 24, 1959.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,220 ft^3/s (34.6 m^3/s) at 2200 Apr. 6, gage height, 5.35 ft (1.783 m), from rating curve extended above 1,100 ft^3/s (31 m^3/s), on basis of slope-area measurement of peak flow; maximum gage height, 5.92 ft (1.804 m) May 26 (due to shifting control); minimum daily discharge, 20 ft^3/s (0.57 m^3/s) Dec. 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41	28	37	28	26	32	308	402	515	565	48	51
2	42	29	36	26	26	34	253	406	474	520	50	50
3	37	83	36	26	26	38	238	382	422	535	55	55
4	38	58	36	26	26	41	278	343	422	510	50	52
5	37	39	36	28	26	41	362	298	422	386	50	52
6	37	37	36	30	26	46	610	271	575	309	50	48
7	38	36	32	30	26	54	367	382	765	156	50	51
8	38	34	28	28	26	70	620	422	790	136	48	52
9	30	34	26	28	26	82	510	386	855	202	48	55
10	26	33	24	30	26	81	780	362	825	188	48	58
11	23	36	24	32	28	90	442	322	790	156	50	60
12	24	90	22	32	28	106	244	298	770	124	50	62
13	25	84	20	30	30	132	212	287	728	132	55	61
14	28	50	22	28	32	146	244	294	185	128	50	57
15	28	45	22	30	32	175	332	322	150	103	50	51
16	28	42	24	32	32	195	418	340	422	103	55	55
17	27	39	24	32	32	195	506	354	655	86	50	55
18	26	37	26	32	32	175	494	358	618	79	50	54
19	27	36	30	32	32	178	565	358	288	76	55	50
20	28	35	30	30	30	185	466	378	175	70	55	57
21	34	35	30	30	30	212	430	418	229	66	55	56
22	49	35	30	30	30	220	466	486	348	63	55	62
23	44	35	30	30	30	238	506	498	530	62	55	63
24	39	36	30	30	30	262	520	590	535	58	55	68
25	52	87	30	30	30	329	458	585	550	55	55	68
26	38	60	28	32	30	430	414	592	575	55	50	63
27	32	46	28	32	30	438	394	614	590	55	58	58
28	30	40	28	30	30	370	418	555	620	55	52	61
29	30	36	30	30	---	515	454	570	580	55	46	56
30	29	36	30	28	---	378	402	595	555	55	49	58
31	28	---	30	28	---	454	---	545	---	50	54	---
TOTAL	1033	1351	895	920	808	5942	12711	13013	15958	5193	1651	1700
MEAN	33.3	45.0	28.9	29.7	28.9	192	424	420	532	168	53.6	56.7
MAX	52	90	37	32	32	515	780	614	855	565	55	68
MIN	23	28	20	26	26	32	212	271	150	50	46	48
AC-FT	2050	2680	1780	1820	1600	11790	25210	25810	31650	10300	3270	3370

CAL YR 1978 TOTAL 12923.8 MEAN 35.4 MAX 175 MIN 9.8 AC-FT 25630
WTR YR 1979 TOTAL 61185.0 MEAN 168 MAX 855 MIN 20 AC-FT 121400

NOTE.--NO GAGE-HEIGHT RECORD JULY 26 TO AUG. 26.

09363500 ANIMAS RIVER NEAR CEDAR HILL, NM

LOCATION.--Lat 37°02'17", long 107°52'25", in sec.7, T.32 N., R.9 W., La Plata County, CO, Hydrologic Unit 14080104, on right bank 0.8 mi (1.3 km) downstream from Florida River, 2.5 mi (4.0 km) upstream from Colorado-New Mexico State line, 8.5 mi (13.7 km) north of Cedar Hill, and at mile 32.9 (km 52.9).

DRAINAGE AREA.--1,090 mi² (2,820 km²), approximately.

PERIOD OF RECORD.--October 1933 to current year. Monthly discharge only for October and November 1933, published in WSP 1313.

REVISED RECORDS.--WSP 1563: 1940 and 1946 (monthly figures only).

GAGE.--Water-stage recorder. Altitude of gage is 5,960 ft (1,817 m), from topographic map. Prior to Sept. 14, 1937, at datum between 1.52 and 1.36 ft (0.46 and 0.41 m) higher. Sept. 15, 1937, to Sept. 30, 1945, at datum 1.36 ft (0.41 m) higher.

REMARKS.--Records good except those for winter period, which are poor. Diversions for irrigation of about 20,000 acres (81 km²) above station. During water years 1944-49, Twin Rocks Canal diverted above station for irrigation below. Slight regulation by Lemon Dam, capacity, 40,100 acre-ft (49.4 hm³), about 30 mi (50 km) upstream on Florida River since November 1963.

AVERAGE DISCHARGE.--46 years, 891 ft³/s (25.23 m³/s), 645,500 acre-ft/yr (796 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,100 ft³/s (371 m³/s) June 19, 1949, gage height, 11.45 ft (3.490 m); minimum, 63 ft³/s (1.78 m³/s) Jan. 21, 1935.

EXTREMES OUTSIDE PERIOD OF RECORD.--A flood in October 1911 exceeded all other known floods at this location.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 4,000 ft³/s (110 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
May 28	1545	*8,710	247	10.00	3.048	June 16	1815	7,420	210	9.39	2.862
June 7	1445	8,660	245	10.04	3.060	June 24	1100	5,540	157	8.24	2.512

Minimum daily discharge, 140 ft³/s (3.96 m³/s) Jan. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	295	247	273	195	250	315	840	2820	6250	4310	1010	431
2	276	249	302	160	270	310	731	2840	5540	4500	939	410
3	266	424	266	140	250	350	669	2760	5330	4290	873	406
4	258	304	250	180	240	310	688	2470	5690	3610	825	394
5	252	271	225	270	240	290	870	2580	6210	3250	772	388
6	243	265	265	270	240	280	1210	3070	6970	2940	733	371
7	248	257	255	250	235	300	1510	3760	7990	2790	717	360
8	237	251	230	226	230	330	1730	3610	7750	2900	725	274
9	214	247	240	224	230	381	1740	2980	6560	2900	739	258
10	206	246	240	220	235	368	2120	2410	5120	2780	729	254
11	195	282	250	210	240	370	1410	2000	4790	2600	639	254
12	191	628	260	270	260	414	999	1760	5350	2440	736	258
13	187	510	280	270	280	505	882	1630	6210	2360	926	258
14	182	366	295	230	320	576	1100	1790	6570	2300	736	266
15	201	336	275	250	330	682	1550	2410	6620	2220	731	266
16	220	311	265	240	340	706	2140	3090	6950	2050	873	278
17	212	295	250	270	335	675	2730	3490	6800	2020	916	306
18	178	284	325	420	310	609	3120	3620	5830	1900	740	302
19	174	281	410	300	290	595	3380	4560	4320	1770	652	286
20	175	276	340	280	275	664	2990	5230	3450	1620	620	285
21	203	251	240	250	320	728	2970	5300	3430	1550	634	297
22	259	252	235	240	300	719	3250	5850	4250	1550	597	307
23	267	276	240	230	290	737	3500	6510	4740	1550	551	299
24	278	276	235	230	270	764	3880	.6180	5330	1420	539	298
25	303	440	235	250	270	861	3450	5640	5010	1390	472	302
26	269	335	230	280	300	987	2970	5790	5260	1290	440	295
27	267	293	220	260	310	1040	2740	7290	5120	1210	430	295
28	262	277	220	240	330	900	2840	8330	5060	1140	436	298
29	248	258	235	250	---	1280	3190	8090	5010	1210	378	289
30	249	264	240	225	---	953	2900	8180	4370	1210	372	279
31	250	---	250	215	---	1040	---	7430	---	1120	474	---
TOTAL	7265	9252	8076	7545	7790	19039	64099	133470	167880	70390	21014	9265
MEAN	234	308	261	243	278	614	2137	4305	5596	2271	678	309
MAX	303	628	410	420	340	1280	3880	8330	7990	4500	1010	431
MIN	174	246	220	140	230	280	669	1630	3430	1120	372	254
AC-FT	14410	18350	16020	14970	15450	37760	127100	264700	333000	139600	41680	18380

CAL YR 1978 TOTAL 314475 MEAN 862 MAX 4700 MIN 173 AC-FT 623800
WTR YR 1979 TOTAL 525085 MEAN 1439 MAX 8330 MIN 140 AC-FT 1042000

09365500 LA PLATA RIVER AT HESPERUS, CO

LOCATION.--Lat 37°17'23", long 108°02'24", in NE¼SW¼ sec.14, T.35 N., R.11 W., La Plata County, Hydrologic Unit 14080105, on right bank at Hesperus 700 ft (213 m) downstream from U.S. Highway 160.

DRAINAGE AREA.--37 mi^2 (96 km^2), approximately.

PERIOD OF RECORD.--June to August 1904, May 1905 to September 1906, August to November 1910, June 1917 to current year. Monthly discharge only for some periods, published in WSP 1313. Records for Nov. 11 to Dec. 31, 1910, published in WSP 289, have been found to be unreliable and should not be used.

REVISED RECORDS.--WSP 1243: 1906(M). WSP 1563: 1923 (monthly figures only). See also PERIOD OF RECORD.

GAGE.--Water-stage recorder. Datum of gage is 8,104.71 ft (2,470.316 m), National Geodetic Vertical Datum of 1929. Prior to May 1, 1920, nonrecording gages and May 1, 1920, to May 24, 1927, water-stage recorder, at several sites about 600 ft (180 m) downstream at different datums. May 25, 1927, to Sept. 30, 1938, water-stage recorder at site 60 ft (18 m) downstream and Oct. 1, 1938, to Sept. 30, 1941, at present site at datum 1.00 ft (0.305 m) higher.

REMARKS.--Records good except those for winter period, which are fair. Cherry Creek ditch exports water above station for irrigation of about 2,000 acres (8.09 km^2) in Cherry Creek drainage. Several observations of water temperature were obtained and are published elsewhere in this report.

COOPERATION.--Records collected and computed by Colorado Division of Water Resources and reviewed by Geological Survey.

AVERAGE DISCHARGE.--63 years (water years 1906, 1918-79), 44.4 ft^3/s (1.257 m^3/s), 32,170 acre-ft/yr (39.7 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,880 ft^3/s (53.2 m^3/s) Sept. 22, 1941, gage height, 4.30 ft (1.311 m), present datum, from rating curve extended above 620 ft^3/s (18 m^3/s), on basis of slope-area measurement of peak flow; maximum gage height, 5.13 ft (1.564 m) Sept. 6, 1970; no flow part of Oct. 24, 1966, caused by filling of pond upstream.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum flood observed occurred Oct. 5, 1911.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,040 ft^3/s (29.5 m^3/s) at 0330 May 27, gage height, 4.30 ft (1.311 m), only peak above base of 230 ft^3/s (6.5 m^3/s); minimum daily, 1.6 ft^3/s (0.045 m^3/s) Oct. 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.3	5.6	8.2	5.5	5.0	5.6	14	214	304	163	21	17
2	5.3	6.0	8.6	4.5	5.0	6.0	14	204	246	193	21	17
3	5.3	7.8	7.8	5.5	4.5	5.6	14	179	256	169	22	16
4	5.3	7.0	7.4	6.5	4.5	5.5	13	159	322	131	23	16
5	5.6	7.0	7.4	7.0	4.5	6.4	14	176	363	115	28	15
6	6.0	7.0	7.0	7.8	4.5	6.4	14	228	460	115	32	14
7	6.0	7.0	5.0	6.5	4.5	6.4	17	271	545	107	31	14
8	6.4	7.0	4.0	5.5	5.0	6.4	20	228	415	97	31	14
9	6.4	7.0	4.0	6.0	5.6	6.7	23	162	300	86	31	13
10	6.4	7.0	4.5	6.0	5.6	6.5	26	127	260	79	30	13
11	6.4	9.1	5.0	6.5	5.6	6.7	28	111	314	68	28	12
12	6.4	12	6.0	6.5	5.3	7.0	25	98	336	64	38	11
13	6.4	10	6.5	6.0	5.0	7.4	25	98	340	62	32	11
14	6.4	9.6	7.0	5.5	5.0	7.8	29	116	390	61	23	11
15	6.0	9.6	7.0	7.0	5.3	7.8	36	190	345	59	22	11
16	6.4	9.6	6.5	7.8	5.6	8.2	57	218	256	50	38	10
17	3.8	9.6	7.8	7.8	6.0	8.2	86	214	190	56	31	10
18	3.8	9.6	10	7.8	6.0	8.2	141	207	175	58	25	9.5
19	2.5	9.1	8.2	7.0	6.0	9.1	153	283	169	61	21	9.0
20	2.2	9.1	7.4	6.0	5.6	10	144	275	163	51	20	9.5
21	2.5	9.1	6.0	6.0	5.3	11	153	271	169	46	21	9.5
22	4.6	9.1	6.0	6.0	5.6	10	179	320	175	47	23	9.0
23	3.8	9.1	6.0	5.0	5.6	11	196	387	181	43	22	8.6
24	2.2	9.1	6.0	5.0	5.0	12	207	360	158	39	21	8.2
25	2.2	10	6.0	5.5	6.0	12	196	351	163	38	20	8.6
26	1.8	9.6	6.0	5.0	6.0	13	200	378	172	34	20	8.5
27	1.6	9.1	6.0	4.5	5.6	14	218	848	178	30	18	9.0
28	2.8	9.1	7.4	4.5	5.6	14	247	782	160	29	18	9.5
29	5.6	8.6	7.0	4.5	---	14	228	733	166	31	17	8.6
30	5.6	8.2	7.0	4.0	---	14	210	670	163	28	18	8.5
31	5.6	---	6.5	4.0	---	14	---	465	---	23	17	---
TOTAL	146.6	256.7	205.2	182.7	148.8	280.9	2927	9323	7834	2233	753	341.2
MEAN	4.73	8.56	6.62	5.89	5.31	9.06	97.6	301	261	72.0	24.6	11.4
MAX	6.4	12	10	7.8	6.0	14	247	848	545	193	38	17
MIN	1.6	5.6	4.0	4.0	4.5	5.5	13	98	158	23	17	8.2
AC-FT	291	509	407	362	295	557	5810	18490	15540	4430	1510	677

CAL YR 1978 TOTAL 15226.7 MEAN 41.7 MAX 291 MIN 1.6 AC-FT 30200
WTR YR 1979 TOTAL 24642.1 MEAN 67.5 MAX 848 MIN 1.6 AC-FT 48880

09366500 LA PLATA RIVER AT COLORADO-NEW MEXICO STATE LINE

LOCATION.--Lat 36°59'51", long 108°11'17", in NW¼SE¼ sec.10, T.32 N., R.13 W., La Plata County, CO, Hydrologic Unit 14080105, on right bank at Colorado-New Mexico State line, 0.2 mi (0.3 km) downstream from Ponds Arroyo, and 4.8 mi (7.7 km) north of La Plata, NM.

DRAINAGE AREA.--331 mi^2 (857 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1920 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1313: 1934(M), 1936(M).

GAGE.--Water-stage recorder. Datum of gage is 5,975.15 ft (1,821.226 m), National Geodetic Vertical Datum of 1929. See WSP 1713 or 1733 for history of changes prior to Mar. 17, 1934.

REMARKS.--Records good except those for periods of ice effect, which are poor. Diversions above station for irrigation of about 15,000 acres (60.7 km^2), mostly above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

COOPERATION.--Records collected and computed by Colorado Division of Water Resources and reviewed by Geological Survey.

AVERAGE DISCHARGE.--59 years, 33.9 ft^3/s (0.960 m^3/s), 24,560 acre-ft/yr (30.3 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,705 ft^3/s (135 m^3/s) Aug. 24, 1927, gage height, 11.36 ft (3.463 m), present datum, from rating curve extended above 750 ft^3/s (21 m^3/s), on basis of slope-area measurement of peak flow; no flow at times in many years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,090 ft^3/s (30.9 m^3/s) at 0300 Apr. 19, gage height, 4.05 ft (1.234 m); no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	2.1	3.8	3.0	4.0	13	63	470	290	90	17	7.0
2	.00	2.1	4.4	2.0	4.0	15	66	413	240	136	15	5.8
3	.00	4.4	3.5	3.0	3.0	15	66	350	194	103	13	5.1
4	.00	2.9	3.8	4.0	2.5	14	63	302	204	79	10	4.1
5	.00	2.4	4.5	4.5	3.0	15	63	305	222	67	9.0	3.5
6	.00	2.4	3.5	5.0	3.0	20	92	345	275	68	10	3.2
7	.00	2.4	4.0	4.0	3.5	30	118	455	352	64	14	2.9
8	.00	2.4	4.0	3.5	4.0	52	160	408	328	58	60	2.9
9	.00	2.6	4.0	3.5	4.5	39	236	332	218	56	26	2.6
10	.00	2.6	4.0	3.5	4.5	32	278	278	135	49	19	1.4
11	.00	3.2	4.0	4.0	5.0	36	171	240	123	40	13	1.8
12	.00	9.1	4.0	4.5	5.5	39	126	210	169	40	10	2.4
13	.00	9.6	3.5	4.0	6.5	41	123	186	240	43	15	3.2
14	.00	5.8	3.5	3.0	7.0	43	143	188	260	47	14	3.8
15	.00	4.8	4.0	5.0	7.5	47	224	212	252	51	12	4.1
16	.00	4.4	3.5	6.0	8.0	63	395	244	254	49	16	4.1
17	.00	4.1	3.0	7.0	8.0	58	596	260	188	52	19	3.8
18	.00	3.8	3.5	8.0	8.5	50	677	265	139	59	18	1.0
19	.00	3.8	3.0	7.0	9.0	53	834	300	78	60	16	1.2
20	.00	3.8	2.0	5.0	10	63	582	332	50	32	14	1.2
21	.23	3.8	2.5	5.0	11	78	524	335	48	30	10	1.4
22	1.6	3.5	3.5	6.0	10	61	593	332	56	26	10	2.4
23	.51	3.5	3.5	4.0	10	58	656	425	90	22	11	2.1
24	.80	3.8	4.0	4.0	9.5	58	652	405	94	22	14	2.1
25	1.8	5.8	3.0	6.0	9.0	61	476	370	95	28	13	1.2
26	.80	4.8	3.0	5.5	10	67	479	332	94	29	13	1.4
27	1.2	4.1	3.5	4.0	12	73	431	677	86	25	12	1.2
28	2.4	3.8	3.5	4.0	13	75	479	610	69	22	11	1.4
29	2.4	3.8	4.0	4.0	---	95	562	544	66	23	10	1.6
30	2.4	3.8	4.0	2.0	---	78	509	582	73	23	9.5	1.6
31	2.4	---	4.0	2.5	---	79	---	375	---	19	9.0	---
TOTAL	16.54	119.4	112.0	136.5	195.5	1521	10437	11082	4982	1512	462.5	81.5
MEAN	.53	3.98	3.61	4.40	6.98	49.1	348	357	166	48.8	14.9	2.72
MAX	2.4	9.6	4.5	8.0	13	95	834	677	352	136	60	7.0
MIN	.00	2.1	2.0	2.0	2.5	13	63	186	48	19	9.0	1.0
AC-FT	33	237	222	271	388	3020	20700	21980	9880	3000	917	162

CAL YR 1978 TOTAL 9127.84 MEAN 25.0 MAX 254 MIN .00 AC-FT 18110
WTR YR 1979 TOTAL 30657.94 MEAN 84.0 MAX 834 MIN .00 AC-FT 60810

09366500 LA PLATA RIVER AT COLORADO-NEW MEXICO STATE LINE--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1977 to current year.

REMARKS.--Chemical data obtained on infrequent schedule from 1970 to 1973 water years.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	TEMPER-ATURE (DEG C)
OCT		
31...	1125	10.0
NOV		
20...	1525	5.5
28...	1105	2.0
DEC		
27...	1145	2.0
JAN		
18...	1615	1.0
23...	1035	5.0
29...	0915	.0
FEB		
27...	1520	4.0
28...	1000	1.0
MAR		
08...	1425	7.0
22...	1155	5.0
27...	1545	8.5
APR		
02...	1130	3.0
APR		
09...	1150	2.5
17...	1115	8.5
25...	1440	14.0
MAY		
01...	1115	9.5
14...	1130	11.5
22...	1530	13.0
26...	1205	11.5
30...	1000	9.0
JUN		
20...	1000	9.5
26...	1330	21.0
JUL		
24...	1215	21.0
AUG		
22...	0755	13.0
SEP		
24...	0910	13.0

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)
OCT										
31...	1125	.80	1500	8.4	9.0	16	K20	140	720	520
NOV										
28...	1105	2.0	1510	8.5	11.4	5	68	500	720	500
DEC										
27...	1145	10	1800	9.1	11.0	27	<6	K20	730	520
JAN										
29...	0915	7.0	1900	8.6	11.6	11	120	K77	820	570
FEB										
28...	1000	10	1600	8.3	11.2	21	480	660	770	570
MAR										
27...	1545	43	1210	8.5	9.5	49	195	K60	680	450
APR										
25...	1440	465	515	8.3	8.3	310	K10	58	240	150
MAY										
22...	1530	318	410	8.0	7.5	74	110	96	170	92
JUN										
26...	1330	109	540	8.5	7.2	25	K60	150	250	140
JUL										
24...	1215	21	950	8.3	7.2	10	120	170	450	270
AUG										
22...	0755	11	1200	8.2	8.4	13	180	160	590	410
SEP										
24...	0910	2.1	1500	7.8	8.5	20	130	420	660	490

K BASED ON NON-IDEAL COLONY COUNT.

09366500 LA PLATA RIVER AT COLORADO-NEW MEXICO STATE LINE--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
OCT										
31...	150	85	73	1.2	2.9	250	1	210	610	37
NOV										
28...	150	83	67	1.1	2.6	260	0	210	610	37
DEC										
27...	160	80	64	1.0	2.1	260	0	210	570	35
JAN										
29...	190	85	66	1.0	2.4	310	0	250	620	38
FEB										
28...	170	84	63	1.0	3.5	250	0	210	690	8.9
MAR										
27...	150	73	48	.8	3.4	270	0	220	490	24
APR										
25...	53	27	24	.7	3.1	120	0	98	140	7.4
MAY										
22...	40	18	11	.4	1.4	100	0	82	110	4.2
JUN										
26...	54	28	25	.7	1.6	130	1	110	170	6.8
JUL										
24...	85	57	45	.9	2.8	220	0	180	340	14
AUG										
22...	120	70	48	.9	2.2	220	0	180	450	22
SEP										
24...	135	78	61	1.2	2.2	--	0	170	600	34

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)
OCT										
31...	.3	12	1110	1090	1.48	2.35	.20	.01	.21	.22
NOV										
28...	.3	11	1150	1090	1.56	6.21	.33	.01	.23	.24
DEC										
27...	.3	19	1150	1060	1.56	31.0	1.0	.04	.37	.41
JAN										
29...	.3	13	1240	1170	1.69	23.4	.82	.02	.34	.36
FEB										
28...	.3	8.7	1170	1150	1.59	31.6	.34	.06	.51	.57
MAR										
27...	.3	8.7	975	931	1.33	113	.35	.04	2.9	2.9
APR										
25...	.3	11	361	325	.49	453	.42	.01	2.9	2.9
MAY										
22...	.2	7.7	303	242	.41	260	.12	.23	.97	1.2
JUN										
26...	.3	9.3	342	360	.47	101	.07	.03	.35	.38
JUL										
24...	.3	11	645	664	.88	36.6	.01	.01	.35	.36
AUG										
22...	.3	6.4	852	827	1.16	25.3	.02	.00	.68	.68
SEP										
24...	.4	11	1010	1040	1.37	5.73	.00	.01	.37	.38

09366500 LA PLATA RIVER AT COLORADO-NEW MEXICO STATE LINE--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	BORON, DISSOLVED (UG/L AS B)	IRON, DISSOLVED (UG/L AS FE)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C)	PHYTOPLANKTON, TOTAL (CELLS PER ML)	PERIPHYTON BIOMASS ASH WEIGHT G/SQ M	PERIPHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M
OCT 31...	.42	.01	.01	70	30	4.2	.5	88	--	--
NOV 28...	.57	.01	.00	80	40	3.7	.5	240	1.18	1.34
DEC 27...	1.4	.09	.06	60	10	3.7	.5	400	--	--
JAN 29...	1.2	.01	.03	60	20	4.4	.4	110	--	--
FEB 28...	.91	.05	.03	70	30	7.9	.8	1100	--	--
MAR 27...	3.3	.48	.03	90	80	5.7	2.1	420	.470	.550
APR 25...	3.3	.87	.01	70	450	7.2	.6	770	--	--
MAY 22...	1.3	.63	.01	9	10	5.6	.9	4800	--	--
JUN 26...	.45	.00	.01	100	20	3.9	--	4600	--	--
JUL 24...	.37	.06	.03	40	10	5.7	.7	120	--	--
AUG 22...	.70	.01	.00	60	10	6.1	--	100	--	--
SEP 24...	.38	.01	.01	60	10	4.9	.9	--	--	--

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	BARIUM, DISSOLVED (UG/L AS BA)	BARIUM, RECOV. FM BOTTOM MATERIAL (UG/G AS BA)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BERYLLIUM, DISSOLVED (UG/L AS BE)	BERYLLIUM, RECOV. FM BOTTOM MATERIAL (UG/G)
NOV 28...	1105	0	--	1	--	--	50	--	--	<1	--
FEB 28...	1000	20	--	1	--	--	0	--	--	0	--
MAY 22...	1530	100	4	0	--	300	0	--	0	0	--
SEP 24...	0910	0	1	1	7	200	80	50	0	<1	0

DATE	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COBALT, DISSOLVED (UG/L AS CO)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)	COPPER, DISSOLVED (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)
NOV 28...	--	1	--	--	0	--	--	3	--	0	--
FEB 28...	--	1	--	--	10	--	--	0	--	2	--
MAY 22...	0	2	--	20	0	--	9	2	--	4	--
SEP 24...	1	3	0	0	10	4	0	<3	5	<10	18

09366500 LA PLATA RIVER AT COLORADO-NEW MEXICO STATE LINE--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	LEAD, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS PB)	LITHIUM TOTAL RECOV-ERABLE (UG/L AS LI)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MANGA-NESE, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)
NOV 28...	--	1	--	--	30	--	20	--	--	.0
FEB 28...	--	1	--	--	30	--	110	--	--	.0
MAY 22...	31	34	--	120	110	610	10	--	<.5	<.5
SEP 24...	0	2	0	40	39	20	3	160	.0	.0

DATE	MERCURY RECOV. FM BOT-TOM MA-TERIAL (UG/G AS HG)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	MOLYB-DENUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	NICKEL, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SELE-NIUM, TOTAL IN BOT-TOM MA-TERIAL (UG/G)
NOV 28...	--	--	0	--	--	0	--	--	4	--
FEB 28...	--	--	2	--	--	0	--	--	3	--
MAY 22...	--	3	3	--	36	1	--	1	1	--
SEP 24...	.02	1	<10	1	0	0	0	2	2	0

DATE	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	ZINC, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS ZN)	GROSS ALPHA, DIS-SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS-SOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)
NOV 28...	.0	--	4	--	--	--	--	--	--	--
FEB 28...	.0	--	30	--	--	--	--	--	--	--
MAY 22...	.1	120	0	--	<4.6	61	2.9	29	2.7	26
SEP 24...	<6.0	0	<3	19	<19	<.4	6.6	<.4	6.0	<.4

09366500 LA PLATA RIVER AT COLORADO-NEW MEXICO STATE LINE--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM
OCT											
31...	1125	.80	7	.02	--	--	--	--	--	--	--
NOV											
28...	1105	2.0	27	.15	--	--	--	26	--	--	--
DEC											
27...	1145	10	80	2.2	--	--	--	79	--	--	--
JAN											
29...	0915	7.0	12	.23	--	--	--	--	--	--	--
FEB											
23...	0940	55	720	107	32	41	60	--	--	--	--
28...	1000	10	50	1.3	--	--	--	76	85	97	100
MAR											
27...	1545	43	414	48	55	65	86	99	100	--	--
APR											
25...	1440	465	4780	6000	22	26	35	73	94	99	100
MAY											
22...	1530	318	1680	1440	14	17	25	65	91	100	--
JUN											
26...	1330	109	151	44	--	--	--	74	--	--	--
JUL											
24...	1215	21	62	3.5	--	--	--	50	--	--	--
AUG											
22...	0755	11	11	.33	--	--	--	--	--	--	--
SEP											
24...	0910	2.1	17	.10	--	--	--	--	--	--	--

09366500 LA PLATA RIVER AT COLORADO-NEW MEXICO STATE LINE--Continued

PHYTOPLANKTON ANALYSES, OCTOBER 1978 TO SEPTEMBER 1979

DATE	OCT 31,78	NOV 28,78	DEC 27,78	JAN 29,79	FEB 28,79	MAR 27,79
TIME	1125	1105	1145	0915	1000	1545
TOTAL CELLS/ML	88	240	400	110	1100	420
DIVERSITY: DIVISION	0.8	0.9	0.0	0.2	0.1	1.0
.CLASS	0.8	0.9	0.0	0.2	0.1	1.0
..ORDER	0.8	0.9	0.2	0.2	0.2	1.0
...FAMILY	1.5	1.6	2.5	1.3	1.6	1.5
....GENUS	1.5	1.8	2.5	1.3	1.6	1.5

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)												
.CHLOROPHYCEAE												
..CHLOROCOCCALES												
...OOCYSTACEAE												
....ANKISTRODESMUS	--	-	--	-	--	-	--	-	--	-	--	-
...SCENEDESMACEAE												
....ACTINASTRUM	--	-	89#	36	--	-	--	-	--	-	--	-
..VOLVOCALES												
...CHLAMYDOMONADACEAE												
....CHLAMYDOMONAS	22#	25	--	-	--	-	3	2	--	-	210#	50
CHRYSOPHYTA												
.BACILLARIOPHYCEAE												
..CENTRALES												
...COSCINODISCACEAE												
....CYCLOTELLA	--	-	--	-	15	4	--	-	9	1	--	-
..PENNALES												
...ACHNANTHACEAE												
....ACHNANTHES	22#	25	--	-	31	8	8	7	--	-	--	-
....COCCONEIS	--	-	--	-	--	-	--	-	--	-	--	-
...CYMBELLACEAE												
....CYMBELLA	--	-	--	-	--	-	--	-	38	4	110#	25
....EPITHEMIA	--	-	--	-	--	-	--	-	--	-	--	-
...FRAGILARIACEAE												
....SYNEDRA	--	-	--	-	15	4	--	-	--	-	--	-
...GOMPHONEMATACEAE												
....GOMPHONEMA	--	-	--	-	93#	23	--	-	47	4	--	-
...NAVICULACEAE												
....AMPHIPLEURA	--	-	22	9	--	-	--	-	--	-	--	-
....ENTOMONEIS	--	-	--	-	--	-	--	-	--	-	--	-
....NAVICULA	--	-	44#	18	100#	25	19#	17	85	8	--	-
...NITZSCHIACEAE												
....NITZSCHIA	44#	50	89#	36	46	12	78#	71	130	12	110#	25
...SURIRELLACEAE												
....SURIRELLA	--	-	--	-	100#	25	3	2	750#	69	--	-
CRYPTOPHYTA (CRYPTOMONADS)												
.CRYPTOPHYCEAE												
..CRYPTOMONADALES												
...CRYPTOMONADACEAE												
....CRYPTOMONAS	--	-	--	-	--	-	--	-	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)												
.CYANOPHYCEAE												
..CHROOCOCCALES												
...CHROOCOCCACEAE												
....ANACYSTIS	--	-	--	-	--	-	--	-	19	2	--	-
..HORMOGONALES												
...OSCILLATORIACEAE												
....LYNGBYA	--	-	--	-	--	-	--	-	--	-	--	-
....OSCILLATORIA	--	-	--	-	--	-	--	-	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)												
.EUGLENOPHYCEAE												
..EUGLENALES												
...EUGLENACEAE												
....EUGLENA	--	-	--	-	--	-	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

09366500 LA PLATA RIVER AT COLORADO-NEW MEXICO STATE LINE--Continued

PHYTOPLANKTON ANALYSES, OCTOBER 1978 TO SEPTEMBER 1979

DATE	APR 25,79		MAY 22,79		JUN 26,79		JUL 24,79		AUG 22,79		SEP 24,79	
TIME	1440		1530		1330		1215		0755		0910	
TOTAL CELLS/ML	770		4800		4600		120		100		2100	
DIVERSITY: DIVISION	0.3		0.2		0.6		1.2		0.0		1.0	
.CLASS	0.3		0.2		0.6		1.2		0.0		1.0	
..ORDER	0.4		0.2		0.6		1.2		1.0		1.5	
...FAMILY	0.4		0.2		0.9		1.2		1.4		2.2	
....GENUS	0.4		0.2		0.9		1.7		1.4		2.2	
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)												
.CHLOROPHYCEAE												
..CHLOROCOCCALES												
...OOCYSTACEAE												
....ANKISTRODESMUS	--	-	--	-	--	-	13	11	--	-	--	-
...SCENEDESMACEAE												
....ACTINASTRUM	--	-	--	-	--	-	--	-	--	-	--	-
..VOLVOCALES												
...CHLAMYDOMONADACEAE												
....CHLAMYDOMONAS	--	-	--	-	--	-	--	-	--	-	13	1
CHRYSOPHYTA												
.BACILLARIOPHYCEAE												
..CENTRALES												
...COSCINODISCACEAE												
....CYCLOTELLA	14	2	--	-	--	-	--	-	39#	38	320#	15
..PENNALES												
...ACHNANTHACEAE												
....ACHNANTHES	--	-	--	-	--	-	13	11	--	-	--	-
....COCCONEIS	--	-	--	-	39	1	64#	56	--	-	--	-
...CYMBELLACEAE												
....CYMBELLA	--	-	--	-	--	-	--	-	--	-	--	-
....EPITHEMIA	14	2	--	-	--	-	--	-	--	-	--	-
...FRAGILARIACEAE												
....SYNEDRA	--	-	--	-	230	5	--	-	--	-	150	7
...GOMPHONEMATACEAE												
....GOMPHONEMA	--	-	--	-	--	-	--	-	--	-	--	-
...NAVICULACEAE												
....AMPHIPLEURA	--	-	--	-	--	-	--	-	--	-	--	-
....ENTOMONEIS	--	-	--	-	--	-	--	-	--	-	13	1
....NAVICULA	--	-	--	-	39	1	--	-	51#	50	190	9
...NITZSCHIACEAE												
....NITZSCHIA	--	-	100	2	390	8	--	-	13	13	620#	29
...SURIRELLACEAE												
....SURIRELLA	14	2	--	-	39	1	--	-	--	-	--	-
CRYPTOPHYTA (CRYPTOMONADS)												
.CRYPTOPHYCEAE												
..CRYPTOMONADALES												
...CRYPTOMONADACEAE												
....CRYPTOMONAS	--	-	--	-	--	-	--	-	--	-	13	1
CYANOPHYTA (BLUE-GREEN ALGAE)												
.CYANOPHYCEAE												
..CHROOCOCCALES												
...CHROOCOCCACEAE												
....ANACYSTIS	--	-	--	-	--	-	--	-	--	-	--	-
..HORMOGONALES												
...OSCILLATORIACEAE												
....LYNGBYA	730#	95	--	-	--	-	--	-	--	-	--	-
....OSCILLATORIA	--	-	4600#	98	3900#	84	--	-	--	-	770#	37
EUGLENOPHYTA (EUGLENOIDS)												
.EUGLENOPHYCEAE												
..EUGLENALES												
...EUGLENACEAE												
....EUGLENA	--	-	--	-	--	-	26#	22	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
      * - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

09370800 MANCOS RIVER NEAR CORTEZ. CO

LOCATION.--Lat 37°06'27". long 108°27'43". in NE¼ sec.15. T.33 N.. R.15 W.. Ute Indian Reservation. Montezuma County. Hydrologic Unit 14080107. on right bank 0.8 mi (1.3 km) upstream from Johnson Canyon. 16 mi (26 km) southeast of Towaoc. and 18 mi (29 km) southeast of Cortez.

DRAINAGE AREA.--302 mi^2 (782 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1976 to June 22. 1979 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 5.700 ft (1.737 m). from topographic map.

REMARKS.--Records good. except those for winter period and period of no gage-height record. which are poor. Flow regulated by Jackson Gulch Reservoir. capacity. 10.000 acre-ft (12.3 hm^3) 20 mi (32 km) upstream on Jackson Gulch. Reservoir is fed by a 3-mi (4.8-km) long canal from West Mancos River. Diversions for irrigation of about 10.000 acres (40.5 km^2) above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge. 1.460 ft^3/s (41.3 m^3/s) May 27. 1979. gage height. 5.60 ft (1.707 m) from floodmark. from rating curve extended above 21 ft^3/s (0.59 m^3/s). on basis of step-backwater method; maximum gage height. 6.33 ft (1.929 m) Dec. 22. 1978. backwater from ice; no flow many days in 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period Oct. 1 to June 22. 1.460 ft^3/s (41.3 m^3/s) May 27. gage height. 5.60 ft (1.707 m) from floodmark. from rating curve extended above 21 ft^3/s (0.59 m^3/s). on basis of step-backwater method; maximum gage height. 6.33 ft (1.929 m) Dec. 22. backwater from ice; minimum daily during the period Oct. 1 to June 22. 6.5 ft^3/s (0.18 m^3/s) Jan. 4.

DISCHARGE. IN CUBIC FEET PER SECOND. WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.0	13	13	7.5	14	30	99	314	835			
2	9.0	13	13	7.0	13	32	90	302	680			
3	8.6	15	13	7.0	11	32	90	260	605			
4	8.6	18	9.0	6.5	11	26	101	221	545			
5	9.0	15	9.0	7.0	10	24	142	239	428			
6	8.6	14	14	8.0	11	30	216	281	400			
7	8.6	13	12	8.5	12	35	284	348	428			
8	9.0	13	7.5	8.5	12	46	305	340	404			
9	9.0	13	7.5	9.0	12	75	360	293	344			
10	9.0	13	7.0	9.5	12	70	360	263	284			
11	9.0	14	7.5	9.0	13	65	280	236	269			
12	9.4	131	7.0	9.0	15	70	150	242	305			
13	9.4	52	7.0	9.5	17	85	110	239	352			
14	9.4	31	7.0	9.0	20	110	162	251	368			
15	9.4	27	7.0	9.0	26	180	324	272	344			
16	9.8	23	9.0	14	32	210	476	364	356			
17	9.8	20	18	40	44	172	508	468	311			
18	9.8	18	60	75	50	120	512	426	269			
19	9.8	18	120	110	50	128	555	440	224			
20	9.8	16	70	95	40	120	412	440	190			
21	14	15	40	75	36	144	368	530	162			
22	20	15	28	60	30	112	416	662	153			
23	18	15	20	44	26	101	472	718	---			
24	16	15	14	26	24	135	480	686	---			
25	25	21	10	17	22	183	344	698	---			
26	18	24	8.5	17	26	225	302	590	---			
27	15	20	7.5	16	30	183	284	1180	---			
28	15	16	7.5	15	28	148	320	1240	---			
29	13	11	7.5	14	---	254	384	1320	---			
30	13	9.5	8.0	13	---	138	320	1260	---			
31	13	---	8.0	13	---	150	---	964	---			
TOTAL	364.0	651.5	576.5	768.0	647	3434	9226	16085	---			
MEAN	11.7	21.7	18.6	24.8	23.1	111	308	519	---			
MAX	25	131	120	110	50	254	555	1320	---			
MIN	8.6	9.5	7.0	6.5	10	24	90	221	---			
AC-FT	722	1290	1140	1520	1280	6810	18300	31900	---			

CAL YR 1978 TOTAL 18065.6 MEAN 49.5 MAX 388 MIN 1.0 AC-FT 35830

NOTE.--NO GAGE HEIGHT RECORD JAN. 23 TO MAR. 14.

09370800 MANCOS RIVER NEAR CORTEZ, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--July 1976 to June 1979 (discontinued).

INSTRUMENTATION.--Water-quality monitor since July 1976.

REMARKS.--Station moved to site 0.8 mi (0.6 km) downstream in June 1979. Record at station 09370820 should be equivalent.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 4,600 micromhos June 4, 1977; minimum, 319 micromhos May 17, 1978.
WATER TEMPERATURES: Maximum, 34.0°C July 31, 1978; minimum, freezing point many days during winter months each year.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 3,910 micromhos Oct. 18; minimum not determined.
WATER TEMPERATURES: Maximum not determined; minimum, freezing point many days during November to February.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
OCT 31...	0930	12	2000	8.5	6.5	9.7	1000	840	230	110
DEC 11...	1005	7.8	2980	8.1	1.0	11.5	1600	1300	330	180
JAN 23...	1100	27	2080	8.0	.0	11.6	1000	790	220	120
FEB 21...	1000	31	2180	8.1	1.0	11.2	1000	800	210	120
MAR 27...	0940	172	1200	8.0	4.0	10.4	670	510	160	65
APR 27...	1000	302	540	7.9	8.0	9.2	230	150	54	22
JUN 05...	1145	445	320	7.7	11.0	8.7	160	88	42	13

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT 31...	120	1.6	4.8	230	1	190	1000	18	.2
DEC 11...	180	2.0	--	370	0	300	1700	24	.2
JAN 23...	140	1.9	5.4	--	0	250	980	21	.2
FEB 21...	150	2.0	4.1	--	0	220	1100	20	.2
MAR 27...	78	1.3	4.7	--	0	160	600	13	.2
APR 27...	27	.8	2.2	--	0	80	200	4.1	.2
JUN 05...	18	.6	1.4	--	0	70	120	2.5	.2

09370800 MANCOS RIVER NEAR CORTEZ, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
OCT 31...	9.8	1610	2.19	56.1	.37	.01	.00	10	20
DEC 11...	13	2610	3.55	55.6	.74	.01	--	70	70
JAN 23...	10	1650	2.24	121	.53	.01	--	10	60
FEB 21...	8.7	1750	2.38	150	.65	.00	--	10	50
MAR 27...	7.0	1030	1.40	478	.50	.01	--	30	20
APR 27...	8.8	367	.50	299	.15	.04	--	60	10
JUN 05...	6.9	251	.34	302	1.1	.01	--	30	20

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2500	2160	2850	2610	2700	1870	1600	489	---			
2	2550	2190	2920	2500	2810	2040	1610	487	240			
3	2590	2060	2690	2700	2880	2160	1600	547	255			
4	2630	2290	2680	2650	2880	1670	1380	700	300			
5	2680	2320	2700	2610	2500	1680	1190	576	320			
6	2720	2420	2840	2590	2420	1810	1100	485	335			
7	2750	2310	2860	2620	2310	2230	970	399	350			
8	2780	2310	2910	2450	2300	2670	860	458	364			
9	2790	2330	2960	2670	2280	2700	800	717	379			
10	2790	2360	3020	2470	2280	2780	810	759	394			
11	2800	2370	3080	2550	2200	2280	890	665	409			
12	2840	1990	3060	2690	2080	1710	1010	563	365			
13	2850	1740	3080	2560	2000	1620	1230	534	354			
14	2880	1890	3060	2310	1890	1620	1000	504	340			
15	2900	1920	3040	2550	1790	1780	723	391	350			
16	2940	2000	2740	2610	1610	1730	526	399	385			
17	2940	2120	2450	2280	1420	1580	519	339	420			
18	2970	2200	2120	1970	1300	1720	502	271	460			
19	2820	2270	1810	1940	1320	1530	485	197	520			
20	2650	2360	2010	2150	1610	1480	505	191	555			
21	2440	2530	2310	2290	2150	1510	520	279	575			
22	2380	2660	2500	2460	2160	1600	500	255	600			
23	2200	2690	2710	2240	1960	1600	485	200	---			
24	2000	2750	2900	2300	1860	1320	485	240	---			
25	1900	2690	3010	2610	1930	1460	510	230	---			
26	1900	2810	3060	2820	1940	1420	520	275	---			
27	1950	2550	3020	2880	1900	1310	581	197	---			
28	2000	2460	2990	2800	1760	1700	517	110	---			
29	2180	2430	3000	2910	---	1400	443	---	---			
30	2090	2660	2880	2910	---	1510	494	---	---			
31	2110	---	2730	2800	---	1520	---	---	---			

09370800 MANCOS RIVER NEAR CORTEZ, CO--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	18.0	9.0	14.0	7.5	---	.0	---	.0	---	.0	---	---
2	18.0	9.0	16.0	8.0	---	.0	---	.0	---	.0	---	---
3	17.0	7.5	11.5	8.5	---	.0	---	.0	---	.0	---	3.5
4	16.0	6.5	13.5	7.0	---	.0	2.0	.0	---	.0	---	---
5	16.0	6.5	12.0	7.0	---	.0	---	.0	---	.0	---	---
6	16.0	6.5	---	---	4.5	.0	---	.0	---	.0	---	---
7	15.5	6.5	---	---	3.0	.0	---	.0	---	.0	---	---
8	16.0	7.0	10.5	3.5	2.0	.0	---	.0	---	.0	---	2.0
9	15.0	7.0	11.0	4.0	1.5	.0	---	.0	---	.0	---	---
10	16.5	7.5	8.5	5.0	1.0	.0	---	.0	---	.0	---	---
11	16.0	7.5	9.5	8.0	.5	.0	.0	.0	---	.0	---	---
12	16.5	8.0	9.0	3.5	---	.0	.0	.0	---	.0	6.0	---
13	16.5	8.0	10.5	1.5	---	.0	---	.0	---	.0	6.5	---
14	15.0	7.0	6.0	2.0	---	.0	---	.0	---	.0	6.5	---
15	14.0	6.0	---	---	---	.0	---	.0	---	.0	8.5	2.5
16	14.0	5.5	---	---	---	.0	---	.0	---	.0	7.5	4.0
17	14.0	6.5	---	---	---	.0	---	.0	---	.0	5.5	2.5
18	15.0	7.5	---	---	---	.0	---	.0	---	.0	10.0	3.5
19	17.0	7.0	---	---	---	.0	---	.0	---	.0	6.5	3.5
20	11.0	7.5	---	---	---	.0	2.0	.0	---	.0	---	---
21	10.5	9.5	---	---	---	.0	---	.0	---	.0	---	---
22	12.0	9.0	---	---	---	.0	.5	.0	---	.0	---	---
23	13.5	8.0	---	---	---	.0	.0	.0	1.5	.0	---	---
24	11.0	9.5	---	---	---	.0	---	.0	---	.0	8.5	3.5
25	12.0	7.5	---	---	---	.0	---	.0	---	.0	10.0	4.0
26	10.5	4.0	---	.0	---	.0	---	.0	3.0	.0	9.0	---
27	11.5	4.0	---	.0	---	.0	---	.0	---	.0	---	---
28	12.0	4.5	---	.0	---	.0	---	.0	8.5	.0	---	---
29	13.0	4.5	---	.0	---	.0	---	.0	---	---	---	---
30	11.0	6.5	---	.0	---	.0	---	.0	---	---	---	---
31	13.5	6.0	---	---	---	.0	---	.0	---	---	---	---

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	12.0	3.5	13.0	9.5						
2	---	---	10.5	6.0	14.5	11.0						
3	---	---	9.0	2.5	14.5	2.5						
4	---	---	13.0	3.0	14.5	3.0						
5	---	---	13.5	4.5	10.5	7.5						
6	---	---	14.0	4.5	---	---						
7	---	---	10.5	3.5	---	---						
8	---	---	8.0	1.5	---	---						
9	---	---	5.0	1.5	---	---						
10	---	---	8.5	3.0	---	---						
11	---	---	9.5	1.5	---	---						
12	---	---	10.5	3.0	---	---						
13	12.0	5.0	13.5	4.0	---	---						
14	12.0	4.0	14.0	4.0	---	---						
15	12.5	4.0	12.0	3.5	---	---						
16	12.0	3.0	13.0	3.5	---	---						
17	11.0	3.5	11.0	2.5	---	---						
18	11.5	3.5	13.5	2.5	---	---						
19	9.5	3.0	14.0	---	---	---						
20	7.0	---	12.0	---	---	---						
21	---	---	13.0	5.0	---	---						
22	---	---	14.5	4.5	---	---						
23	---	---	15.5	5.0	---	---						
24	---	---	13.5	5.5	---	---						
25	---	---	14.0	9.0	---	---						
26	---	---	15.0	9.5	---	---						
27	---	---	11.5	8.0	---	---						
28	12.5	6.0	16.5	7.5	---	---						
29	10.0	2.0	17.5	10.0	---	---						
30	12.5	4.0	15.5	8.0	---	---						
31	---	---	15.5	8.5	---	---						

09370820 MANCOS RIVER BELOW JOHNSON CANYON, NEAR CORTEZ, CO

LOCATION.--Lat 37°05'57", long 108°27'56", in NE¼ sec.15, T.33 N., R.15 W., Montezuma County, Hydrologic Unit 14080107, on right bank downstream from bridge, 600 ft (183 m) downstream from Johnson Canyon, 15 mi (26 km) southeast of Towac, and 18 mi (29 km) southeast of Cortez.

DRAINAGE AREA.--320 mi² (829 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June to September 1979.

GAGE.--Water-stage recorder. Altitude of gage is 5,670 ft (1,728 m), from topographic map.

REMARKS.--Records good. Flow regulated by Jackson Gulch Reservoir, capacity 10,000 acre-ft (12.3 hm³) 20 mi (32 km) upstream on Jackson Canyon. Reservoir is fed by water diverted from the West Mancos River. Diversions for irrigation of about 12,000 acres (49 km²) above station.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period June to September, 267 ft³/s (7.561 m³/s) date unknown; minimum daily, 9.8 ft³/s (0.278 m³/s) Sept. 22, 27, 28, 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1									---	140	50	23
2									---	180	44	21
3									---	190	36	20
4									---	160	30	20
5									---	130	20	18
6									---	120	13	17
7									---	110	13	16
8									---	100	37	15
9									---	95	17	16
10									---	72	14	14
11									---	81	13	13
12									---	86	12	13
13									---	88	12	11
14									---	89	14	11
15									---	84	20	11
16									---	83	23	11
17									---	89	24	11
18									---	116	24	11
19									---	148	22	10
20									---	144	32	10
21									---	138	35	10
22									---	148	47	9.8
23									140	142	70	11
24									130	125	57	11
25									130	110	53	11
26									130	103	53	10
27									140	85	56	9.8
28									140	80	39	9.8
29									130	80	26	10
30									130	70	25	9.8
31									---	60	26	---
TOTAL									---	3447	987	395.2
MEAN									---	111	31.8	13.2
MAX									---	190	70	23
MIN									---	60	12	9.8
AC-FT									---	6840	1950	784

09370820 MANCOS RIVER BELOW JOHNSON CANYON NEAR CORTEZ, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--June to September 1979.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: June to September 1979.
WATER TEMPERATURES: June to September 1979.

INSTRUMENTATION.--Water-quality monitor since June 1979.

REMARKS.--Daily maximum and minimum specific conductance available in district office. This station provides equivalent record for station 09370800 located 0.8 mi (0.6 km) upstream, discontinued June 1979.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 2,250 micromhos Sept. 26; minimum not determined.
WATER TEMPERATURES: Maximum, 33.5°C Aug. 11; minimum not determined.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM ADSORPTION RATIO
JUL												
09...	1000	86	900	8.1	14.5	8.0	440	300	110	41	43	.9
19...	1310	150	1000	8.0	19.0	7.3	450	310	110	43	59	1.2
AUG												
07...	1100	13	1600	7.4	21.5	6.8	790	630	160	96	110	1.7
SEP												
10...	0940	14	1800	7.4	15.5	7.9	900	720	180	110	120	1.7

DATE	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	HYDROXIDE ION (MG/L AS OH)	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	BROMIDE DISSOLVED (MG/L AS BR)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)
JUL												
09...	2.7	--	0	--	140	350	5.7	.2	--	7.7	645	.88
19...	--	170	0	0	140	420	7.1	.3	.1	7.9	732	1.00
AUG												
07...	3.7	--	0	--	160	880	19	.2	--	8.6	1370	1.86
SEP												
10...	2.9	--	0	--	180	980	18	.2	--	11	1530	2.08

DATE	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	ALUMINUM, DISSOLVED (UG/L AS AL)	BORON, DISSOLVED (UG/L AS B)	CHROMIUM, DISSOLVED (UG/L AS CR)	CHROMIUM, HEXAVALENT, DIS. (UG/L AS CR)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)	STRONTIUM, DISSOLVED (UG/L AS SR)
JUL											
09...	151	.02	.01	--	--	--	--	--	10	9	--
19...	296	--	--	--	30	70	0	0	--	10	320
AUG											
07...	51.0	.04	.00	--	--	--	--	--	10	20	--
SEP											
10...	57.8	.33	.01	.00	--	--	--	--	<10	20	--

09370820 MANCOS RIVER BELOW JOHNSON CANYON NEAR CORTEZ, CO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1									---	780	1160	1610
2									---	810	1180	1630
3									---	828	1270	1650
4									---	863	1450	1670
5									---	901	1590	1700
6									---	915	1670	1750
7									---	916	1740	1780
8									---	903	1560	1790
9									---	895	1790	1840
10									---	932	1680	1830
11									---	848	1710	1890
12									---	788	1740	2020
13									---	756	1790	2020
14									---	759	1780	2040
15									---	773	1680	2080
16									---	850	1640	2120
17									---	812	1780	2100
18									---	854	1650	2100
19									---	893	1700	2110
20									---	813	1650	2120
21									---	798	1560	2120
22									525	806	1450	2130
23									635	804	1010	2140
24									680	854	981	2100
25									710	897	1010	2080
26									730	905	1030	2090
27									700	978	1030	2090
28									680	1030	1150	2100
29									770	1040	1360	2100
30									750	1060	1520	2110
31									---	1120	1590	---

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1					---	---	27.5	---	---	---	27.0	13.5
2					---	---	26.5	---	---	---	26.5	13.5
3					---	---	25.0	8.0	---	11.5	26.5	13.5
4					---	---	---	9.5	---	14.0	27.5	13.5
5					---	---	---	11.0	---	17.0	26.0	13.5
6					---	---	---	12.0	---	19.0	27.0	14.0
7					---	---	---	13.0	32.5	20.5	27.5	14.5
8					---	---	---	13.0	29.0	19.0	27.0	14.5
9					---	---	21.5	14.0	29.0	17.0	28.5	15.0
10					---	---	23.0	---	30.0	17.5	26.5	15.0
11					---	---	21.5	---	33.5	18.5	25.5	13.0
12					---	---	23.5	---	32.5	20.5	24.5	12.5
13					---	---	24.0	---	32.0	17.0	21.5	10.0
14					---	---	26.0	---	25.5	17.5	21.0	11.0
15					---	---	25.5	---	21.0	16.5	18.5	10.5
16					---	---	27.0	20.5	22.5	17.5	21.5	10.0
17					---	---	28.0	20.5	24.0	16.0	22.5	11.0
18					---	---	26.0	---	26.5	15.5	24.0	13.0
19					---	---	22.5	---	24.5	15.0	22.5	12.5
20					---	---	24.5	17.0	22.0	15.5	21.0	11.5
21					---	---	24.0	17.5	25.0	12.5	22.5	12.5
22					21.5	---	23.5	19.0	23.5	---	22.0	11.0
23					21.5	13.5	25.5	---	23.0	---	21.0	10.0
24					23.5	15.0	26.0	---	22.5	14.0	22.0	10.0
25					25.0	19.0	28.0	---	22.5	14.0	21.0	10.5
26					25.5	21.0	28.5	---	23.0	---	20.5	13.0
27					26.0	20.5	---	---	25.0	---	20.5	20.0
28					27.0	20.5	---	---	25.0	---	21.0	12.0
29					27.5	---	---	---	26.0	---	20.0	10.0
30					27.5	---	---	---	28.0	12.0	19.5	9.0
31					---	---	---	---	28.0	13.0	---	---

09371000 MANCOS RIVER NEAR TOWAOC, CO

LOCATION.--Lat 37°01'39", long 108°44'27", Ute Indian Reservation, Montezuma County, Hydrologic Unit 14080107, on left bank 700 ft (210 m) upstream from bridge on U.S. Highway 666, 2.0 mi (3.2 km) north of Colorado-New Mexico State line, 6.0 mi (9.7 km) upstream from Aztec Creek, and 12 mi (19 km) south of Towaoc.

DRAINAGE AREA.--550 mi^2 (1,420 km^2), approximately.

PERIOD OF RECORD.--October 1920 to September 1943, February 1951 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1733: 1924 (monthly figures only).

GAGE.--Water-stage recorder. Datum of gage is 5,055.98 ft (1,541.063 m), National Geodetic Vertical Datum of 1929. See WSP 1713 or 1733 for history of changes prior to Mar. 11, 1954.

REMARKS.--Records good except those for winter period, which are poor. Diversions for irrigation of about 10,000 acres (40.5 km^2) above station. One diversion above station for irrigation of about 100 acres (405,000 m^2) below. Flow regulated by Jackson Gulch Reservoir, capacity, 10,000 acre-ft (12.3 hm^3) since March 1949. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--51 years, 50.7 ft^3/s (1.436 m^3/s), 36,730 acre-ft/yr (45.3 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,300 ft^3/s (150 m^3/s) Oct. 14 1941, gage height, 7.33 ft (2.225 m), present site and datum, from rating curve extended above 200 ft^3/s (5.7 m^3/s), on basis of slope-area measurement of peak flow; maximum gage height, 8.50 ft (2.591 m) Sept. 6, 1970; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 700 ft^3/s (20 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Apr. 17	1100	770	21.8	4.50	1.372	May 27	2100	*2,200	62.3	6.13	1.868

Minimum daily discharge, 0.25 ft^3/s (0.007 m^3/s) Sept. 18-23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.2	10	14	8.0	15	33	135	275	868	151	45	12
2	5.9	9.8	15	7.5	14	35	111	278	785	228	41	9.4
3	5.7	13	14	7.5	12	34	93	238	720	200	35	8.4
4	5.7	20	9.4	7.0	12	28	83	215	685	171	25	7.7
5	5.2	15	9.0	7.5	11	26	89	208	466	141	17	7.0
6	5.2	12	16	8.5	12	32	193	245	474	128	10	6.2
7	5.7	10	14	9.0	13	38	305	308	542	118	5.9	5.2
8	5.7	9.8	7.5	9.0	13	51	327	323	534	112	5.8	4.7
9	5.4	9.8	7.7	9.5	13	83	430	287	456	104	9.3	4.5
10	4.3	9.8	7.0	10	13	75	422	245	360	82	3.1	6.2
11	4.1	9.8	7.5	9.5	14	68	322	222	317	78	6.2	5.9
12	3.9	63	7.5	9.5	16	74	157	220	338	89	5.7	4.7
13	4.1	100	7.5	10	19	93	123	225	378	86	4.2	4.5
14	4.3	36	7.5	9.5	22	124	134	228	386	82	2.8	4.1
15	4.1	26	7.5	9.5	28	177	243	275	342	76	3.9	3.9
16	4.1	22	10	15	36	185	475	332	342	73	10	3.9
17	4.5	19	20	44	48	177	574	526	320	74	22	3.2
18	4.7	16	56	82	55	114	489	538	266	99	24	.25
19	5.0	14	143	118	53	118	535	526	238	123	21	.25
20	5.4	14	84	104	43	105	356	546	195	124	27	.25
21	7.7	12	42	82	39	153	296	660	151	120	23	.25
22	13	12	35	67	33	120	326	904	147	120	21	.25
23	25	11	22	48	29	94	398	765	147	116	37	.25
24	18	12	15	30	26	110	438	665	145	102	46	.28
25	19	16	11	18	24	149	317	690	149	83	43	.31
26	23	20	9.0	18	27	193	266	630	147	79	41	.31
27	15	20	8.0	17	33	205	242	1330	155	71	43	.31
28	13	16	8.0	15	30	167	260	1360	151	65	35	.31
29	12	12	8.5	15	---	271	326	1330	143	62	21	.31
30	11	10	8.5	14	---	181	287	1280	147	61	14	.31
31	10	---	8.5	14	---	185	---	1060	---	52	12	---
TOTAL	265.9	580.0	639.6	832.5	703	3498	8752	16934	10514	3270	659.9	135.14
MEAN	8.58	19.3	20.6	26.9	25.1	113	292	546	350	105	21.3	3.50
MAX	25	100	143	118	55	271	574	1360	868	228	46	12
MIN	3.9	9.8	7.0	7.0	11	26	83	208	143	52	2.8	.25
AC-FT	527	1150	1270	1650	1390	6940	17360	33590	20850	6490	1310	209

CAL YR 1978 TOTAL 17099.46 MEAN 46.8 MAX 411 MIN .00 AC-FT 33920
WTR YR 1979 TOTAL 46754.04 MEAN 128 MAX 1360 MIN .25 AC-FT 92740

09371400 HARTMAN DRAW AT CORTEZ, CO

LOCATION.--Lat 37°19'26", long 108°36'52", in NW¼NE¼ sec.4, T.35 N., R.15 W., Montezuma County, Hydrologic Unit 14080202, on left bank 600 ft (180 m) upstream from mouth, 0.30 mi (0.5 km) upstream from McElmo Fall, and 1.2 mi (1.9 km) southwest of Cortez.

DRAINAGE AREA.--34.0 mi² (88.1 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1978 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,900 ft (1,798 m), from topographic map.

REMARKS.--Records good except those for winter period, which are poor. Diversions for irrigation above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 164 ft³/s (4.64 m³/s) Mar. 16, 1979, gage height, 4.44 ft (1.353 m); minimum daily, 1.0 ft³/s (0.028 m³/s) Oct. 14-18, 24, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 164 ft³/s (4.64 m³/s) Mar. 16, gage height, 4.44 ft (1.353 m); minimum daily, 1.0 ft³/s (0.028 m³/s) Oct. 14-18, 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.2	6.9	14	2.0	3.6	13	25	9.0	18	24	12	9.6
2	3.7	7.4	24	1.6	3.6	15	18	8.7	24	34	14	7.4
3	4.7	11	12	1.4	3.2	14	21	8.7	23	29	14	5.9
4	5.4	9.6	9.5	1.4	3.0	15	16	8.9	27	28	14	5.0
5	5.5	9.0	9.0	1.8	2.8	15	15	8.5	31	25	16	4.1
6	5.6	9.0	8.0	1.4	2.8	15	14	8.4	21	26	16	4.0
7	5.5	8.7	7.5	1.2	3.0	23	14	7.8	18	24	13	4.0
8	5.5	8.4	7.0	1.4	3.2	29	13	11	20	23	16	4.1
9	5.5	8.4	6.5	1.6	3.4	34	13	14	26	23	16	4.0
10	5.4	8.4	7.5	1.7	3.4	29	24	15	22	20	14	4.0
11	5.6	9.6	8.0	1.7	3.2	30	19	12	21	21	13	3.6
12	5.5	19	8.5	1.6	3.8	38	15	9.7	20	22	14	3.7
13	3.8	14	10	1.6	3.8	48	13	9.0	19	19	14	3.7
14	1.0	12	11	1.7	3.8	57	13	8.2	18	19	16	3.9
15	1.0	11	12	1.7	4.0	72	12	9.6	19	18	20	4.2
16	1.0	10	12	4.0	4.0	80	11	12	18	18	26	4.1
17	1.0	9.9	14	11	4.4	43	11	9.6	21	20	26	3.9
18	1.0	9.4	33	6.0	5.5	28	11	9.6	21	22	24	3.7
19	1.1	9.2	68	5.0	8.0	27	9.9	8.4	23	22	24	3.6
20	1.4	9.0	30	4.6	10	33	9.7	7.8	22	20	24	3.0
21	2.7	9.4	10	4.4	11	59	10	7.8	22	20	23	3.1
22	3.0	9.6	5.0	4.4	10	46	9.9	8.2	21	21	20	3.0
23	2.1	12	2.8	4.4	9.0	37	9.9	8.0	20	18	19	2.7
24	1.0	15	2.4	4.4	8.9	29	9.7	11	20	19	17	2.8
25	6.1	17	2.0	4.0	9.5	24	9.9	14	20	16	16	2.8
26	7.2	20	1.8	3.6	10	21	9.9	16	20	15	15	2.8
27	6.8	15	1.7	3.6	11	19	9.6	39	22	14	13	3.1
28	6.9	12	1.6	3.6	12	18	9.6	12	23	15	13	3.0
29	7.4	10	1.5	3.4	---	22	9.4	14	22	16	13	3.0
30	7.8	10	1.5	3.2	---	22	9.0	14	21	14	14	3.1
31	7.7	---	1.8	3.2	---	24	---	15	---	12	13	---
TOTAL	131.1	329.9	343.6	96.6	163.9	976	394.5	354.9	643	638	522	118.9
MEAN	4.23	11.0	11.1	3.12	5.85	31.5	13.2	11.4	21.4	20.6	16.8	3.96
MAX	7.8	20	68	11	12	80	25	39	31	34	26	9.6
MIN	1.0	6.9	1.5	1.2	2.8	13	9.0	7.8	18	12	12	2.7
AC-FT	260	654	682	192	325	1940	782	704	1280	1270	1040	236

WTR YR 1979 TOTAL 4712.4 MEAN 12.9 MAX 80 MIN 1.0 AC-FT 9350

09371400 HARTMAN DRAW AT CORTEZ, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1978 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1978 to current year.
WATER TEMPERATURES: April 1978 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 3,530 micromhos Jan. 2, 1979; minimum, 1,360 micromhos June 6, 1979.
WATER TEMPERATURES: Maximum, 27.5°C June 26, 1979; minimum, freezing point on many days during winter period each year.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 3,530 micromhos Jan. 2; minimum, 1,360 micromhos June 6.
WATER TEMPERATURES: Maximum, 27.5°C June 26; minimum, 0.0°C on many days during November to February.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2580	2950	2820	3380	3120	3260	3070	2700	1560	1760	1920	1960
2	2620	2960	2730	3420	3120	3130	2930	2640	1500	1760	1920	2030
3	2630	2880	2910	3290	3140	3220	2640	2600	1540	1760	1910	2100
4	2590	3010	2990	3160	3160	3270	2880	2660	1540	1770	1930	2180
5	2580	2950	3010	3100	3180	3250	2890	2710	1520	1770	1940	2250
6	2440	2920	3010	3070	3180	3150	2890	2730	1540	1760	1940	2260
7	2430	2910	3110	3060	3180	2990	2910	2740	1550	1770	1900	2280
8	2540	2980	3200	3100	3180	2910	2940	2750	1620	1770	1790	2300
9	2600	3060	3290	3150	3150	2770	2970	2930	1660	1760	1600	2320
10	2660	3100	3290	3070	3170	2840	3000	2980	1700	1760	1530	2340
11	2670	3100	3280	3030	3190	2980	3080	3050	1720	1640	1500	2380
12	2750	3160	3210	3050	3160	3210	3080	3060	1730	1630	1660	2380
13	2810	3410	3170	3080	3050	2920	3080	3060	1790	1660	1680	2340
14	2850	3230	3100	3210	2980	2370	3100	3040	1820	1670	1610	2300
15	2920	3170	2990	3090	3010	2100	3120	2820	1830	1680	1690	2240
16	2920	3180	2890	3020	3070	2290	3070	2520	1840	1730	1700	2320
17	2930	3150	2800	3080	3060	2340	2950	2320	1850	1770	1700	2390
18	2860	3140	2400	2720	3110	2530	2790	2160	1850	1870	1690	2380
19	2910	3130	2230	2700	3220	2640	2700	2160	1850	1850	1870	2410
20	2920	3140	2650	2820	3160	2720	2660	2170	1830	1730	1880	2460
21	3060	3140	3000	3020	3040	2580	2710	2290	1820	1720	1680	2500
22	3080	3150	3060	3080	3150	2580	2780	2140	1830	1680	1500	2550
23	3170	3200	3210	3080	3330	2630	2870	1780	1820	1700	1610	2590
24	3010	3210	3210	3080	3340	2670	2950	1720	1830	1750	1650	2620
25	2890	2770	3190	3100	3360	2760	3020	1720	1860	1760	1680	2660
26	2880	2860	3240	3120	3330	2870	3100	1670	1840	1800	1720	2720
27	2880	2900	3270	3120	3210	2940	3090	1740	1820	1810	1780	2830
28	2930	2910	3210	3120	3250	2910	2960	1790	1790	1820	1800	2910
29	2950	2890	3130	3140	---	3110	2860	1720	1780	1840	1800	2960
30	2920	2850	3150	3160	---	3180	2770	1650	1780	1880	1840	3040
31	2900	---	3230	3160	---	3080	---	1560	---	1910	1880	---

09371400 HARTMAN DRAW AT CORTEZ, CO--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	17.0	8.0	10.0	7.0	4.5	.0	.5	.0	---	---	6.0	3.0
2	16.5	8.5	12.5	7.0	4.0	.0	.5	.0	---	---	6.0	2.0
3	15.0	6.5	10.0	7.5	1.0	.0	.5	.0	---	---	7.5	1.5
4	14.5	6.0	11.0	6.0	.0	.0	.5	.0	---	---	6.0	1.5
5	14.5	6.0	10.5	6.5	.0	.0	.5	.0	---	---	6.5	1.5
6	14.5	6.5	9.0	5.0	.0	.0	.5	.0	---	---	8.0	1.5
7	14.0	6.5	8.5	4.0	.0	.0	.5	.0	1.0	.0	9.0	2.0
8	15.5	7.0	8.5	4.0	.0	.0	.5	.0	.5	.5	9.0	2.0
9	14.5	7.0	8.5	4.0	.5	.0	.5	.0	.5	.5	7.5	1.5
10	15.5	7.0	8.0	5.0	.5	.0	.5	.0	.5	.5	7.0	1.0
11	15.0	7.0	9.0	7.0	1.0	.0	.5	.0	.5	.5	8.0	1.0
12	15.5	7.0	7.5	4.0	.5	.0	.5	.0	.5	.5	8.5	1.0
13	15.5	7.0	5.0	2.5	.5	.0	.5	.0	1.0	.5	8.0	1.5
14	14.5	6.5	5.5	3.0	.5	.0	.5	.0	1.0	1.0	6.5	2.0
15	14.0	6.0	5.5	3.0	.5	.0	.5	.0	1.0	1.0	8.0	2.0
16	13.5	6.0	5.0	1.0	.5	.0	.5	.0	1.0	1.0	7.0	2.0
17	12.5	7.0	4.5	.5	.5	.0	.5	.0	1.0	1.0	6.5	2.0
18	15.5	8.0	4.5	.0	.5	.0	.5	.0	1.0	1.0	8.0	2.0
19	14.0	6.0	4.5	.0	.5	.0	.5	.0	1.0	1.0	7.0	3.0
20	10.0	7.0	5.0	.5	.5	.0	.5	.0	1.5	1.0	6.0	4.5
21	10.0	8.5	5.0	1.0	.5	.0	.5	.0	2.0	1.5	4.5	3.5
22	11.5	8.5	5.0	3.0	.5	.0	.5	.0	5.0	2.0	8.5	3.0
23	12.5	7.5	6.0	3.0	.5	.0	.5	.0	5.5	1.5	10.5	3.0
24	11.0	9.5	6.0	4.0	.5	.0	---	---	6.5	1.5	11.0	3.5
25	12.0	7.5	5.5	4.0	.5	.0	---	---	5.0	1.5	12.0	4.0
26	10.5	5.0	5.0	3.5	.5	.0	---	---	6.5	2.0	11.0	5.5
27	10.5	5.0	4.5	1.5	.5	.0	---	---	8.0	3.0	9.5	6.5
28	11.0	5.5	3.0	.0	.5	.0	---	---	7.0	1.5	8.5	6.5
29	11.0	5.5	3.0	1.0	.5	.0	---	---	---	---	7.0	5.5
30	9.5	7.0	4.5	1.0	.5	.0	---	---	---	---	11.0	4.5
31	11.5	6.5	---	---	.5	.0	---	---	---	---	8.0	5.0

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	8.5	2.5	19.5	11.0	21.0	12.5	25.0	21.0	23.5	15.5	20.5	13.5
2	8.0	2.5	18.0	11.0	21.0	12.0	24.0	19.0	24.0	16.5	21.0	13.5
3	9.5	2.5	18.0	8.5	22.0	14.0	24.5	19.0	24.0	16.0	21.0	14.0
4	11.0	3.5	19.5	7.5	20.5	14.0	24.0	17.5	24.0	16.0	21.5	14.5
5	13.5	4.5	19.0	9.0	21.5	15.0	25.0	18.0	25.5	18.0	20.5	13.0
6	15.0	6.0	19.0	9.5	22.5	14.5	25.5	20.5	24.5	18.0	21.0	13.0
7	15.5	6.5	17.0	9.0	24.0	17.5	25.5	19.0	23.5	18.0	21.5	14.0
8	16.5	7.0	11.0	7.0	21.5	16.5	26.0	19.0	23.0	18.0	20.5	15.0
9	14.0	8.0	8.0	6.0	21.0	13.0	24.0	19.0	23.0	17.0	22.5	15.0
10	10.0	6.0	14.0	5.5	23.5	13.0	20.5	13.0	23.0	17.5	21.0	15.5
11	7.5	4.0	13.5	6.0	25.5	16.0	20.5	13.5	24.5	17.5	19.5	13.0
12	9.0	3.5	17.5	6.5	26.0	17.5	21.5	14.0	22.5	18.5	19.5	12.5
13	12.5	3.5	19.5	7.5	27.0	18.5	21.5	15.0	22.5	18.0	17.5	10.0
14	15.5	5.0	20.5	9.0	26.5	19.5	22.0	15.5	20.0	17.0	16.5	10.0
15	17.0	6.5	19.0	10.5	26.0	19.0	22.0	16.0	18.5	16.5	16.0	9.5
16	17.5	7.5	16.0	12.5	25.5	17.5	22.0	18.0	19.0	16.5	17.5	9.5
17	16.5	8.0	19.5	11.0	24.5	17.0	23.5	17.5	19.0	14.0	17.5	10.0
18	17.5	8.5	21.0	10.5	23.5	16.5	22.5	17.5	18.0	14.0	18.0	11.0
19	16.5	7.5	19.0	12.5	23.5	14.5	22.5	16.5	18.0	14.0	18.0	11.5
20	16.5	6.0	17.0	12.5	25.0	15.5	22.5	17.5	18.0	14.0	16.0	10.0
21	17.5	7.0	21.5	13.5	25.5	16.5	22.0	17.0	19.5	12.0	17.0	10.0
22	19.0	9.5	17.5	13.5	25.5	17.5	23.5	17.5	20.5	12.5	17.0	9.5
23	18.5	9.5	21.0	13.0	26.0	17.0	22.5	16.0	20.5	13.0	16.5	8.5
24	15.0	9.5	18.5	14.5	26.5	18.0	23.5	16.5	20.5	12.5	16.5	8.5
25	15.5	9.0	19.0	13.0	27.0	19.5	23.5	16.0	19.5	13.0	15.5	9.0
26	16.0	9.0	20.0	14.0	27.5	20.5	23.5	16.5	21.0	15.5	15.5	10.5
27	18.0	9.0	20.5	13.5	26.5	19.5	23.0	17.0	21.0	14.0	15.0	9.0
28	18.5	9.5	22.5	13.5	27.0	19.0	23.5	17.5	20.5	14.0	15.0	8.0
29	17.5	9.0	21.5	15.0	27.0	19.5	25.0	18.5	20.5	13.5	14.5	7.0
30	19.0	8.5	20.5	14.5	26.0	21.5	23.5	16.0	21.5	15.5	14.0	6.0
31	---	---	20.0	12.0	---	---	23.0	16.5	21.0	15.0	---	---

09371420 McELMO CREEK ABOVE ALKALI CANYON, NEAR CORTEZ, CO

LOCATION.--Lat 37°19'38", long 108°38'55", in SE¼SE¼ sec.31, T.36 N., R.16 W., Montezuma County, Hydrologic Unit 14080202, on left bank 0.9 mi (1.4 km) upstream from Alkali Canyon and 4.0 mi (6.4 km) southwest of Cortez.

DRAINAGE AREA.--147 mi² (381 km²).

PERIOD OF RECORD.--October 1972 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,750 ft (1,753 m), from topographic map.

REMARKS.--Records good. Diversions from tributaries above station for irrigation. Low flows are mainly return flow from irrigated areas. Water is imported above station from Dolores River basin for irrigation of about 33,000 acres (134 km²) above and below station in Montezuma Irrigation District and for municipal use by city of Cortez. A small amount of water is diverted at times to Mancos River basin. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--7 years, 24.5 ft³/s (0.694 m³/s), 17,750 acre-ft/yr (21.9 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 816 ft³/s (23.1 m³/s) July 31, 1976, gage height, 5.92 ft (1.804 m), from rating curve extended above 190 ft³/s (5.4 m³/s), on basis of step-backwater method; minimum daily, 1.5 ft³/s (0.042 m³/s) Sept. 21, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 726 ft³/s (20.6 m³/s) May 27, gage height, 5.62 ft (1.713 m), from rating curve extended above 190 ft³/s (5.4 m³/s), on basis of step-backwater method; minimum daily, 4.6 ft³/s (0.13 m³/s) Oct. 14, 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.9	13	18	11	13	33	93	33	58	35	17	24
2	8.9	13	31	10	12	34	71	24	59	50	18	18
3	8.9	22	22	12	11	32	71	56	51	44	19	14
4	8.9	20	14	13	10	26	59	26	49	41	20	13
5	9.3	18	13	14	9.5	24	60	23	49	37	20	11
6	10	16	13	15	11	33	86	20	39	36	20	8.9
7	9.3	15	12	15	11	64	129	17	33	34	20	8.5
8	9.3	14	11	11	12	114	120	27	34	30	27	9.3
9	9.3	13	11	13	12	122	108	35	52	31	29	10
10	8.9	13	10	15	12	75	148	31	42	28	24	10
11	8.9	14	11	15	13	75	147	25	41	29	24	9.3
12	8.5	141	11	15	14	120	93	20	38	30	24	9.3
13	7.5	29	11	15	15	130	77	22	34	28	24	8.9
14	4.6	20	11	11	16	192	75	24	31	29	27	8.9
15	4.6	18	11	13	18	195	80	27	35	28	35	8.5
16	4.8	16	11	16	20	177	83	28	35	27	48	10
17	6.2	18	11	30	24	122	61	37	36	30	52	11
18	6.0	17	100	100	30	79	55	31	36	35	51	11
19	6.0	16	270	120	36	72	48	29	37	40	54	11
20	6.5	14	100	60	50	84	44	36	39	36	56	11
21	16	13	30	36	44	142	40	48	38	50	54	11
22	21	13	15	26	36	114	38	55	34	40	49	11
23	22	13	14	20	30	84	38	39	33	34	46	11
24	16	14	14	17	26	83	34	51	35	31	36	11
25	24	33	14	16	24	83	33	56	34	27	34	11
26	16	28	14	16	26	86	31	117	34	24	33	11
27	13	22	13	14	28	84	24	302	35	20	29	11
28	13	18	13	13	31	77	27	90	34	23	27	11
29	13	17	13	13	---	134	28	79	32	23	27	10
30	13	16	13	13	---	100	36	57	31	23	29	9.3
31	13	---	13	13	---	100	---	76	---	16	33	---
TOTAL	335.3	647	868	721	594.5	2882	2037	1541	1168	986	1036	332.9
MEAN	10.8	21.6	28.0	23.3	21.2	93.0	67.9	49.7	38.9	31.8	32.5	11.1
MAX	24	141	270	120	50	196	148	302	59	50	56	24
MIN	4.6	13	10	10	9.5	24	24	17	31	16	17	8.5
AC-FT	665	1280	1720	1430	1180	5720	4040	3060	2320	1960	2030	660

CAL YR 1978 TOTAL 6870.7 MEAN 18.8 MAX 270 MIN 2.4 AC-FT 13630
WTR YR 1979 TOTAL 13118.7 MEAN 35.9 MAX 302 MIN 4.6 AC-FT 26020

09371495 MUD CREEK NEAR CORTEZ, CO

LOCATION.--Lat 37°19'10", long 108°40'03", in SE¼NE¼ sec.1, T.35 N., R.17 W., Montezuma County, Hydrologic Unit 14080202, on right bank 0.4 mi (0.6 km) upstream from mouth, and 4 mi (6.4 km) southwest of Cortez.

DRAINAGE AREA.--33.6 mi² (87.0 km²).

PERIOD OF RECORD.--April 1978 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,740 ft (1,750 m), from topographic map.

REMARKS.--Records fair except those for winter period and period of indefinite stage-discharge relation, which are poor. Several small diversions above station for irrigation of hay meadows above and below gage. Most of flow is return flow from irrigated areas. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 277 ft³/s (7.84 m³/s) May 27, gage height, 5.26 ft (1.603 m); maximum gage height, 7.40 ft (2.256 m) Jan. 18, ice jam; minimum daily discharge, 0.44 ft³/s (0.012 m³/s) July 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	1.0	.96	.72	1.4	4.8	4.7	3.8	11	2.8	6.3	7.8
2	1.4	1.0	2.8	.96	1.5	5.0	3.4	3.8	13	3.0	6.4	8.1
3	1.5	1.4	1.8	.80	1.3	5.5	3.0	3.8	6.0	3.2	7.1	10
4	1.0	1.3	1.1	.64	1.2	4.0	1.9	3.8	5.8	2.9	6.9	9.4
5	1.1	1.2	1.2	.64	1.1	4.8	1.0	3.8	6.9	3.0	6.1	7.1
6	.88	1.0	1.2	.76	1.1	6.0	1.2	3.6	9.0	1.5	5.8	6.5
7	1.0	1.0	1.0	.68	1.2	10	2.0	3.6	5.6	.52	6.3	6.4
8	1.1	.96	.96	.56	1.3	14	2.2	6.0	5.7	.44	6.6	5.4
9	1.1	1.1	.68	.72	1.4	15	2.1	9.8	9.8	.48	6.4	8.1
10	1.1	1.2	1.1	.72	1.4	13	12	7.2	7.9	.56	6.0	5.0
11	1.1	1.4	2.0	.76	1.4	13	15	5.2	9.6	.64	5.6	5.8
12	1.2	17	3.0	.80	1.5	12	5.0	6.8	6.6	.72	5.7	5.4
13	1.4	2.3	4.0	.76	1.5	12	3.4	7.4	5.0	.72	5.4	5.2
14	3.5	1.7	5.0	.76	1.6	21	3.3	7.2	5.2	2.4	5.6	6.0
15	5.3	1.5	5.0	.80	1.6	26	3.8	8.5	4.0	3.2	6.1	5.4
16	6.4	1.4	5.0	.80	1.7	16	5.2	9.8	3.6	1.9	7.8	4.7
17	6.8	1.2	6.0	2.0	1.9	9.0	7.6	20	3.0	.88	6.3	3.5
18	7.1	1.3	10	6.0	2.2	5.1	9.4	25	2.4	3.9	6.4	2.1
19	7.2	1.2	16	3.0	2.8	4.4	9.6	17	1.9	6.6	6.8	2.4
20	5.8	1.1	6.0	2.6	4.2	4.5	5.3	12	2.0	7.6	6.6	2.0
21	5.1	1.1	3.0	2.0	3.8	21	5.1	20	2.0	6.3	6.6	1.9
22	4.6	1.1	2.0	2.0	3.2	19	4.5	26	2.2	6.0	6.6	1.8
23	3.0	1.2	1.6	2.0	2.8	5.7	5.0	13	2.7	5.3	4.4	1.7
24	2.8	1.2	1.2	2.0	2.8	4.3	5.4	22	2.6	5.7	2.5	1.3
25	3.1	2.9	1.0	2.0	2.8	4.2	5.1	30	2.9	5.7	4.5	1.3
26	2.5	2.3	.90	1.9	3.2	4.7	4.4	46	2.7	6.1	4.1	1.3
27	2.4	1.4	.80	1.6	3.8	5.0	4.2	154	2.7	6.3	2.7	1.5
28	2.2	.88	.80	1.5	5.0	4.5	4.2	26	2.7	7.2	2.9	1.4
29	3.0	.80	.80	1.4	---	13	4.0	6.8	2.6	8.1	3.0	1.4
30	1.6	.88	.70	1.4	---	5.7	4.0	8.5	2.7	6.8	5.2	1.4
31	1.1	---	.70	1.3	---	5.4	---	11	---	6.3	7.4	---
TOTAL	88.88	55.02	88.30	44.58	60.7	297.6	147.0	531.4	150.2	116.76	176.3	131.4
MEAN	2.87	1.83	2.85	1.44	2.17	9.60	4.90	17.1	5.01	3.77	5.69	4.38
MAX	7.2	17	16	6.0	5.0	26	15	154	13	8.1	7.8	10
MIN	.88	.80	.68	.56	1.1	4.0	1.0	3.6	1.9	.44	2.5	1.3
AC-FT	176	109	175	88	120	590	292	1050	298	232	350	261

WTR YR 1979 TOTAL 1888.14 MEAN 5.17 MAX 154 MIN .44 AC-FT 3750

09371700 McELMO CREEK BELOW CORTEZ, CO

LOCATION.--Lat 37°20'26", long 108°48'19", in NW¼NW¼ sec.35, T.36 N., R.18 W., Montezuma County, Hydrologic Unit 14080202, on left bank 100 ft (30 m) downstream from bridge on State Highway 32, 150 ft (46 m) downstream from Sand Canyon, and 11.7 mi (18.8 km) west of Cortez.

DRAINAGE AREA.--283 mi² (733 km²).

PERIOD OF RECORD.--October 1972 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,430 ft (1,655 m), from topographic map.

REMARKS.--Records good except those for winter period, which are poor. Diversions above station by Black Dike ditch for irrigation of 310 acres (1.25 km²) above station and Rock Creek ditch for irrigation of 650 acres (2.63 km²) below station. Low flows are mainly return flows from irrigated areas. Water is imported above station from Dolores River basin for irrigation of about 33,000 acres (134 km²) above and below station in Montezuma Irrigation District and for municipal use by city of Cortez. A small amount of water is diverted at times to Mancos River basin. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--7 years, 37.2 ft³/s (1.054 m³/s), 26,950 acre-ft/yr (33.2 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,130 ft³/s (60.3 m³/s) July 19, 1977, gage height, 8.96 ft (2.731 m), from floodmarks, from rating curve extended above 400 ft³/s (11 m³/s), on basis of step-backwater method; minimum daily, 0.04 ft³,s (0.001 m³/s) Sept. 9, 1974.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,170 ft³/s (33.1 m³/s) May 25, gage height, 7.05 ft (2.149 m); minimum daily, 5.0 ft³/s (0.14 m³/s) Sept. 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	6.4	26	20	24	75	196	23	97	48	20	28
2	28	6.4	40	16	24	83	158	19	112	70	22	21
3	23	16	34	20	22	85	144	39	91	68	23	20
4	23	26	26	20	20	63	128	20	89	62	23	16
5	22	22	24	20	18	61	137	14	88	57	24	14
6	19	21	20	22	19	89	171	13	80	50	24	14
7	20	21	20	24	20	149	214	11	68	42	24	12
8	21	20	20	20	22	220	214	13	51	36	44	6.5
9	19	20	17	24	22	246	192	31	96	38	32	6.4
10	9.8	20	16	26	22	149	244	25	78	35	27	5.8
11	9.6	20	17	26	24	145	234	20	74	31	26	5.8
12	9.6	200	17	26	24	178	128	21	69	33	27	5.6
13	9.6	70	18	24	24	210	108	29	63	35	30	5.2
14	8.5	28	18	20	26	262	107	29	55	32	32	5.2
15	8.0	26	18	24	26	310	124	23	52	33	46	5.6
16	7.3	22	19	26	28	312	126	26	54	30	53	5.8
17	8.0	24	20	40	30	248	105	37	52	31	50	6.0
18	8.8	24	137	130	36	180	102	33	55	31	55	6.2
19	8.8	22	316	160	46	162	91	44	55	39	50	6.2
20	9.3	19	132	80	55	173	70	42	60	48	50	6.2
21	15	18	64	50	69	278	53	80	66	47	53	5.6
22	15	18	24	36	52	232	51	96	58	60	46	5.0
23	12	18	24	26	45	195	50	49	55	50	42	5.2
24	8.8	20	22	26	46	180	47	41	55	44	33	5.4
25	11	44	22	26	45	182	50	75	54	52	28	5.4
26	9.8	38	22	26	47	190	51	368	52	40	30	5.4
27	7.3	30	22	26	63	196	42	380	50	28	26	5.4
28	7.1	26	22	24	83	167	36	198	44	27	23	5.4
29	7.1	24	22	24	---	254	27	190	43	28	21	5.8
30	6.8	22	22	22	---	202	28	137	44	27	24	5.4
31	6.4	---	22	22	---	202	---	128	---	23	30	---
TOTAL	407.6	891.8	1243	1076	982	5681	3428	2254	1970	1275	1068	255.6
MEAN	13.1	29.7	40.1	34.7	35.1	183	114	72.7	65.7	41.1	34.5	8.52
MAX	29	200	316	160	83	312	244	380	112	70	50	28
MIN	6.4	6.4	16	16	18	61	27	11	43	23	20	5.0
AC-FT	808	1770	2470	2130	1950	11270	6800	4470	3910	2530	2120	507

CAL YR 1978 TOTAL 8287.70 MEAN 22.7 MAX 316 MIN .80 AC-FT 16440
WTR YR 1979 TOTAL 20532.00 MEAN 56.3 MAX 360 MIN 5.0 AC-FT 40730

NOTE.--NO GAGE-HEIGHT RECORD JAN. 1 TO FEB. 20.

09372000 McELMO CREEK NEAR COLORADO-UTAH STATE LINE

LOCATION.--Lat 37°19'27", long 109°00'54", in NE¼ sec.2, T.35 N., R.20 W., Montezuma County, Hydrologic Unit 14080202, on right bank 1.5 mi (2.4 km) upstream from Colorado-Utah State line, 2.0 mi (3.2 km) upstream from Yellowjacket Creek, and 2.0 mi (3.2 km) west of former town of McElmo.

DRAINAGE AREA.--346 mi² (896 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1951 to current year.

REVISED RECORDS.--WSP 1925: 1951-52(M), 1957(M). WRD Colo. 1972: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 5,890 ft (1,490 m), from topographic map.

REMARKS.--Records good. Diversions for irrigation of about 1,780 acres (7.20 km²) above station. One diversion above station for irrigation of about 60 acres (243,000 m²) below. Part of flow is return water from irrigated lands of Montezuma Irrigation District (water imported from Dolores River basin).

AVERAGE DISCHARGE.--28 years, 45.2 ft³/s (1.280 m³/s), 32,750 acre-ft/yr (40.4 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,040 ft³/s (86.1 m³/s) Aug. 7, 1967, gage height, 7.58 ft (2.310 m), from floodmark in gage well, from rating curve extended above 2,100 ft³/s (59 m³/s); maximum gage height, 8.13 ft (2.478 m) Sept. 6, 1970; minimum daily discharge, 0.08 ft³/s (0.002 m³/s) Sept. 9, 10, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 520 ft³/s (18 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 18	1300	*1,730	49.0	7.05	2.149	May 26	2230	1,270	36.0	6.47	1.972

Minimum daily discharge, 6.0 ft³/s (0.17 m³/s) Sept. 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	20	35	30	29	112	205	50	145	94	26	44
2	33	23	79	20	28	131	160	43	143	114	32	35
3	23	35	64	28	24	117	141	67	133	109	27	35
4	19	36	28	28	23	83	126	52	119	105	30	28
5	18	30	32	28	20	70	126	27	116	92	32	20
6	18	27	24	30	21	102	155	22	112	86	40	20
7	16	24	24	30	23	162	202	20	109	79	35	19
8	15	24	25	23	25	226	189	21	109	64	56	12
9	14	23	21	27	25	317	170	44	148	59	49	8.5
10	7.0	21	20	32	25	163	200	36	131	50	46	8.0
11	7.0	30	22	30	26	134	256	28	122	39	43	10
12	7.0	259	22	32	28	162	170	22	114	40	42	9.7
13	9.0	108	22	32	37	198	138	36	102	37	47	11
14	11	46	22	23	47	225	131	36	91	42	54	10
15	12	43	22	27	62	278	134	24	81	34	58	6.0
16	12	37	22	33	76	343	136	17	81	34	99	6.5
17	10	35	22	80	94	268	112	23	87	36	107	9.7
18	13	35	565	225	100	189	109	24	91	50	106	8.5
19	16	33	444	246	94	163	92	27	94	70	112	7.5
20	18	33	184	98	112	162	81	49	95	84	107	15
21	29	29	79	70	109	305	75	75	91	79	130	15
22	37	34	32	62	83	258	71	107	86	84	69	13
23	35	43	26	46	65	205	71	50	81	73	78	15
24	29	43	28	34	54	184	71	40	79	52	55	20
25	35	64	28	34	47	191	84	65	73	59	50	24
26	35	67	28	35	59	196	87	193	68	39	58	26
27	25	47	28	32	97	195	62	633	70	29	49	28
28	25	36	28	27	102	175	58	238	60	29	42	26
29	25	32	28	28	---	272	56	230	68	33	35	26
30	25	33	28	26	---	222	59	187	78	33	36	28
31	21	---	28	26	---	204	---	168	---	29	46	---
TOTAL	634.0	1350	2060	1522	1535	6012	3727	2654	2977	1860	1806	544.4
MEAN	20.5	45.0	66.5	49.1	54.8	194	124	85.6	99.2	60.0	58.3	18.1
MAX	37	259	565	246	112	343	256	633	148	114	112	44
MIN	7.0	20	20	20	20	70	56	17	60	29	26	6.0
AC-FT	1260	2680	4090	3020	3040	11920	7390	5260	5900	3690	3580	1080

CAL YR 1978 TOTAL 12144.8 MEAN 33.3 MAX 565 MIN 1.5 AC-FT 24090
WTR YR 1979 TOTAL 26681.4 MEAN 73.1 MAX 633 MIN 6.0 AC-FT 52920

09372000 Mc ELMO CREEK NEAR COLORADO-UTAH STATE LINE--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1977 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)
OCT											
31...	0930	24	3400	8.4	10.0	--	9.2	28	K16	220	1800
DEC											
04...	0910	25	3500	8.3	.0	--	11.8	26	560	1200	1700
JAN											
03...	0940	24	3900	8.6	.0	--	12.2	30	K13	100	2100
30...	1100	26	4200	8.1	.0	--	11.9	32	K2	430	2200
FEB											
23...	0940	55	3480	8.2	2.0	--	11.3	58	K84	K120	1700
MAR											
26...	0940	226	2600	8.1	14.0	--	8.7	96	100	K100	1400
APR											
25...	0850	79	3000	8.5	11.0	--	9.3	61	160	180	1400
MAY											
22...	1200	128	2700	8.2	18.0	1500	7.8	280	<1200	200	1300
JUN											
26...	1035	61	2300	8.0	20.0	--	7.7	34	180	760	1100
JUL											
24...	0900	54	2200	8.2	19.0	--	7.9	27	220	1000	990
AUG											
21...	0915	94	2000	7.8	17.0	--	7.8	38	K380	430	1100
SEP											
24...	0945	21	3000	7.9	16.5	6.7	7.8	35	500	300	1600

DATE	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)
OCT										
31...	1600	310	250	260	2.7	8.1	300	1	250	2100
DEC										
04...	1500	320	230	260	2.7	8.5	330	0	270	1900
JAN										
03...	--	380	290	330	3.1	--	--	0	--	2200
30...	1800	420	270	300	2.8	6.8	430	0	350	2300
FEB										
23...	1400	310	230	260	2.7	7.4	370	0	300	2000
MAR										
26...	1100	270	170	170	2.0	7.5	300	0	250	1300
APR										
25...	1200	280	180	220	2.5	4.8	290	0	240	1600
MAY										
22...	1100	260	150	170	2.1	.2	200	0	160	1300
JUN										
26...	830	230	120	140	1.9	4.6	290	0	240	1000
JUL										
24...	740	230	100	130	1.8	5.4	300	0	250	1000
AUG										
21...	880	230	120	130	1.7	4.7	235	0	193	990
SEP										
24...	1300	306	190	240	3.0	7.1	--	0	270	1800

K BASED ON NON-IDEAL COLONY COUNT.

09372000 Mc ELMO CREEK NEAR COLORADO-UTAH STATE LINE--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)
OCT 31...	28	.3	5.6	3320	3110	202	1.3	.01	.70	.71
DEC 04...	80	.4	11	3290	2980	222	2.1	.02	.83	.85
JAN 03...	84	.4	14	4100	--	266	3.2	.04	.84	.88
30...	79	.4	14	3770	3600	265	3.5	.22	.62	.84
FEB 23...	61	.4	11	3280	3060	489	2.4	.32	2.3	2.6
MAR 26...	54	.4	9.1	2380	2130	1450	1.7	.06	.40	.46
APR 25...	50	.4	9.3	2780	2490	593	2.2	.04	1.8	1.8
MAY 22...	44	.4	11	2270	2030	785	2.0	.05	12	12
JUN 26...	34	.4	9.6	1880	1680	310	.81	.04	.74	.78
JUL 24...	33	.4	11	1810	1660	264	.62	.02	.73	.75
AUG 21...	32	.4	6.4	1770	1630	449	.71	.01	.50	.51
SEP 24...	56	.5	4.9	2760	2780	156	.02	.04	.19	.23

DATE	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	BORON, DISSOLVED (UG/L AS B)	IRON, DISSOLVED (UG/L AS FE)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C)	PHYTOPLANKTON, TOTAL (CELLS PER ML)	PERIPHYTON BIOMASS ASH WEIGHT G/SQ M	PERIPHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M
OCT 31...	2.0	.02	.01	260	20	7.1	.5	2300	--	--
DEC 04...	3.0	.39	.21	230	--	10	1.4	260	1.10	1.26
JAN 03...	4.1	.10	.02	240	20	9.5	.5	270	--	--
30...	4.3	.15	.05	240	370	8.5	.5	45	--	--
FEB 23...	5.0	.75	.10	180	20	11	--	210	--	--
MAR 26...	2.2	.97	.03	150	30	10	.6	410	--	--
APR 25...	4.0	.64	.04	160	40	10	.5	420	--	--
MAY 22...	14	1.5	.04	150	10	12	--	930	--	--
JUN 26...	1.6	.10	.03	180	20	9.2	--	260	--	--
JUL 24...	1.4	.18	.07	150	60	8.8	.9	300	--	--
AUG 21...	1.2	.30	.04	180	30	12	.8	13000	--	--
SEP 24...	.25	.02	.02	250	50	11	1.4	--	--	--

09372000 Mc ELMO CREEK NEAR COLORADO-UTAH STATE LINE--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	BARIUM, DISSOLVED (UG/L AS BA)	BARIUM, RECOV. FM BOTTOM MATERIAL (UG/G AS BA)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BERYLLIUM, DISSOLVED (UG/L AS BE)	BERYLLIUM, RECOV. FM BOTTOM MATERIAL (UG/G)
DEC 04...	0910	--	--	1	--	--	0	--	--	0	--
FEB 23...	0940	0	--	1	--	--	0	--	--	0	--
MAY 22...	1200	0	2	1	4	300	100	88	0	0	0
SEP 24...	0945	0	1	1	--	200	60	--	0	<1	--

DATE	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COBALT, DISSOLVED (UG/L AS CO)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)	COPPER, DISSOLVED (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)
DEC 04...	--	1	--	--	10	--	--	2	--	5	--
FEB 23...	--	1	--	--	10	--	--	1	--	1	--
MAY 22...	0	2	0	90	0	6	180	0	0	1	13
SEP 24...	0	6	--	0	10	--	0	<3	--	20	--

DATE	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	LITHIUM TOTAL RECOVERABLE (UG/L AS LI)	LITHIUM DISSOLVED (UG/L AS LI)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY DISSOLVED (UG/L AS HG)
DEC 04...	--	5	--	--	140	--	230	--	--	.0
FEB 23...	--	1	--	--	150	--	270	--	--	.0
MAY 22...	440	3	20	230	100	2800	20	220	.3	.0
SEP 24...	2	0	--	150	150	140	110	--	.1	.1

09372000 Mc ELMO CREEK NEAR COLORADO-UTAH STATE LINE--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG)	MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	MOLYBDENUM, RECOV. FM BOTTOM MATERIAL (UG/G)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, DISSOLVED (UG/L AS NI)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G)
DEC 04...	--	--	3	--	--	12	--	--	7	--
FEB 23...	--	--	5	--	--	1	--	--	10	--
MAY 22...	.04	16	5	14	260	15	0	33	12	0
SEP 24...	--	2	2	--	3	3	--	4	4	--

DATE	VANADIUM, DISSOLVED (UG/L AS V)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	GROSS ALPHA, DISSOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DISSOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DISSOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)
DEC 04...	5.3	--	50	--	--	--	--	--	--	--
FEB 23...	.0	--	40	--	--	--	--	--	--	--
MAY 22...	.0	760	20	46	<43	580	16	260	14	240
SEP 24...	<6.0	10	34	--	<57	<.4	24	1.1	21	1.1

09372000 Mc ELMO CREEK NEAR COLORADO-UTAH STATE LINE--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM
OCT							
31...	0930	24	34	2.2	--	--	--
DEC							
04...	0910	25	233	16	--	--	--
JAN							
03...	0940	24	1	.06	--	--	--
30...	1100	26	196	14	--	--	--
MAR							
26...	0940	226	2330	1420	31	40	62
APR							
25...	0850	79	1080	230	41	56	78
MAY							
22...	1200	128	10200	3530	38	49	73
JUN							
26...	1035	61	282	46	--	--	--
JUL							
24...	0900	54	381	56	--	--	--
AUG							
21...	0915	94	718	182	--	--	--
SEP							
24...	0945	21	60	3.4	--	--	--
27...	0900	43	1010	117	49	64	90

DATE	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM
OCT						
31...	--	--	--	--	--	--
DEC						
04...	--	--	92	--	--	--
JAN						
03...	--	--	--	--	--	--
30...	--	--	--	--	--	--
MAR						
26...	95	100	--	--	--	--
APR						
25...	--	--	98	100	--	--
MAY						
22...	97	100	--	--	--	--
JUN						
26...	--	--	90	--	--	--
JUL						
24...	--	--	85	--	--	--
AUG						
21...	--	--	77	--	--	--
SEP						
24...	--	--	--	--	--	--
27...	--	--	96	97	99	100

09372000 McELMO CREEK NEAR COLORADO-UTAH STATE LINE--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
OCT				
11...	1600	365	66	65
FEB				
01...	1415	222	37	22
JUN				
06...	1600	2580	2700	18800

09372000 Mc ELMO CREEK NEAR COLORADO-UTAH STATE LINE--Continued

PHYTOPLANKTON ANALYSES, OCTOBER 1978 TO SEPTEMBER 1979

DATE	OCT 31,78	DEC 4,78	JAN 3,79	JAN 30,79	FEB 23,79	MAR 26,79
TIME	0930	0910	0940	1100	0940	0940
TOTAL CELLS/ML	2300	260	270	45	210	410
DIVERSITY: DIVISION	0.0	0.9	1.2	0.5	0.6	0.0
.CLASS	0.0	0.9	1.2	0.5	0.6	0.0
..ORDER	0.1	0.9	1.7	0.5	1.1	0.0
...FAMILY	1.3	0.9	1.9	1.9	1.7	0.0
....GENUS	1.7	0.0	2.1	1.9	1.7	0.0

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)												
.CHLOROPHYCEAE												
..CHLOROCOCCALES												
...OOCYSTACEAE												
....TREUBARIA	--	-	--	-	--	-	--	-	--	-	--	-
...SCENEDESMACEAE												
....SCENEDESMUS	--	-	--	-	150#	57	--	-	--	-	--	-
..ULOTRICHALES												
...MICROSPORACEAE												
....MICROSPORA	--	-	--	-	--	-	--	-	--	-	--	-
..VOLVOCALES												
...CHLAMYDOMONADACEAE	--	-	87#	33	--	-	--	-	--	-	--	-
....CHLAMYDOMONAS	--	-	--	-	15	6	5	11	--	-	--	-
CHRYSOPHYTA												
.BACILLARIOPHYCEAE												
..CENTRALES												
...COSCINODISCACEAE												
....CYCLOTELLA	47	2	--	-	20	8	--	-	30	14	--	-
....MELOSIRA	--	-	--	-	40#	15	--	-	--	-	--	-
..PENNALES												
...ACHNANTHACEAE												
....RHOICOSPHENIA	23	1	--	-	--	-	5	11	--	-	--	-
...CYMBELLACEAE												
....CYMBELLA	--	-	--	-	--	-	5	11	--	-	--	-
...FRAGILARIACEAE												
....SYNEDRA	70	3	--	-	5	2	--	-	--	-	--	-
...GOMPHONEMATACEAE												
....GOMPHONEMA	330	14	--	-	--	-	--	-	--	-	--	-
...NAVICULACEAE												
....CALONEIS	70	3	--	-	--	-	--	-	--	-	--	-
....ENTOMONEIS	--	-	--	-	--	-	--	-	--	-	--	-
....GYROSIGMA	--	-	--	-	--	-	--	-	--	-	--	-
....NAVICULA	1600#	68	170#	67	15	6	25#	56	--	-	410#	100
....NEIDIUM	70	3	--	-	--	-	--	-	--	-	--	-
...NITZSCHIACEAE												
....NITZSCHIA	120	5	--	-	--	-	--	-	30	14	--	-
...SURIRELLACEAE												
....SURIRELLA	23	1	--	-	5	2	5	11	120#	57	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)												
.CYANOPHYCEAE												
..CHROOCOCCALES												
...CHROOCOCCACEAE												
....ANACYSTIS	--	-	--	-	15	6	--	-	--	-	--	-
..HORMOGONALES												
...OSCILLATORIACEAE												
....LYNGBYA	--	-	--	-	--	-	--	-	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)												
.EUGLENOPHYCEAE												
..EUGLENALES												
...EUGLENACEAE												
....TRACHELOMONAS	--	-	--	-	--	-	--	-	30	14	--	-

NOTE: # - DOMINANT ORGANISM: EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED: LESS THAN 1/2%

09372000 McELMO CREEK NEAR COLORADO-UTAH STATE LINE--Continued

PHYTOPLANKTON ANALYSES, OCTOBER 1978 TO SEPTEMBER 1979

DATE	APR 25,79		MAY 23,79		JUN 25,79		JUL 24,79		AUG 21,79		SEP 24,79	
TIME	0850		1200		1035		0900		0915		0945	
TOTAL CELLS/ML	420		930		260		300		13000		130	
DIVERSITY: DIVISION	0.9		0.0		0.0		0.3		0.3		0.5	
.CLASS	0.9		0.0		0.0		0.3		0.3		0.5	
..ORDER	0.9		0.0		0.0		1.1		0.7		0.5	
...FAMILY	1.1		0.0		1.0		1.7		0.7		1.4	
....GENUS	1.2		0.0		1.0		1.9		0.7		1.4	
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)												
.CHLOROPHYCEAE												
..CHLOROCOCCALES												
...OOCYSTACEAE												
....TREUBARIA	--	-	--	-	--	-	--	-	770	6	--	-
...SCENEDESMACEAE												
....SCENEDESMUS	--	-	--	-	--	-	--	-	--	-	--	-
..ULOTRICHALES												
...MICROSPORACEAE												
....MICROSPORA	--	-	--	-	--	-	--	-	12000#	88	--	-
..VOLVOCALES												
...CHLAMYDOMONADACEAE	--	-	--	-	--	-	--	-	--	-	--	-
....CHLAMYDOMONAS	--	-	--	-	--	-	13	4	--	-	13	10
CHRYSOPHYTA												
.BACILLARIOPHYCEAE												
..CENTRALES												
...COSCINODISCACEAE												
....CYCLOTELLA	--	-	--	-	--	-	90#	30	390	3	--	-
....MELOSIRA	--	-	--	-	--	-	--	-	--	-	--	-
..PENNALES												
...ACHNANTHACEAE												
....RHOICOSPHENIA	--	-	--	-	--	-	--	-	--	-	--	-
...CYMBELLACEAE												
....CYMBELLA	--	-	--	-	--	-	--	-	--	-	--	-
...FRAGILARIACEAE												
....SYNEDRA	--	-	--	-	--	-	--	-	--	-	--	-
...GOMPHONEMATACEAE												
....GOMPHONEMA	--	-	--	-	--	-	--	-	--	-	--	-
...NAVICULACEAE												
....CALONEIS	14	3	--	-	--	-	--	-	--	-	--	-
....ENTOMONEIS	--	-	--	-	--	-	--	-	130	1	--	-
....GYROSIGMA	--	-	--	-	--	-	13	4	--	-	--	-
....NAVICULA	84#	20	930#	100	100#	40	51#	17	130	1	64#	50
....NEIDIUM	--	-	--	-	--	-	--	-	--	-	--	-
...NITZSCHIACEAE												
....NITZSCHIA	--	-	--	-	150#	60	130#	43	130	1	52#	40
...SURIRELLACEAE												
....SURIRELLA	28	7	--	-	--	-	--	-	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)												
.CYANOPHYCEAE												
..CHROOCOCCALES												
...CHROOCOCCACEAE												
....ANACYSTIS	--	-	--	-	--	-	--	-	--	-	--	-
..HORMOGONALES												
...OSCILLATORIACEAE												
....LYNGBYA	290#	70	--	-	--	-	--	-	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)												
.EUGLENOPHYCEAE												
..EUGLENALES												
...EUGLENACEAE												
....TRACHELOMONAS	--	-	--	-	--	-	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM: EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED: LESS THAN 1/2%

TRANSMOUNTAIN DIVERSIONS FROM COLORADO RIVER BASIN IN COLORADO

There are 24 tunnels or ditches, all of which are equipped with water-stage recorders and Parshall flumes or sharp-crested weirs. Records furnished by Colorado Division of Water Resources. The locations of these diversions are given in the following list.

09010000 Grand River ditch diverts water from tributaries of Colorado River to La Poudre Pass Creek (tributary to Cache la Poudre River) in NW¼ sec.21, T.6 N., R.75 W., in Platte River basin. Two collection ditches beginning at headgates located in sec.28, T.5 N., R.76 W., and sec.29, T.6 N., R.75 W., intercept all tributaries upstream on each side of the Colorado River and converge at La Poudre Pass.
REVISIONS (WATER YEARS).--WSP 1313: 1912-27.

09012000 Eureka ditch diverts water from tributaries of Tonahutu Creek between headgate in sec.7, T.4 N., R.74 W., and Sprague Pass, in Colorado River basin, to Spruce Creek (tributary to Big Thompson River) in sec.16, T.4 N., R.74 W., in Platte River basin.
REVISIONS (WATER YEARS).--WSP 1313: 1949.

09013000 Alva B. Adams tunnel diverts water from Grand Lake and Shadow Mountain Lake in NW¼ sec.9, T.3 N., R.75 W., in Colorado River basin, to Lake Estes (Big Thompson River) in sec.30, T.5 N., R.72 W., in Platte River basin. For daily discharge, see elsewhere in this report.

09021500 Berthoud Pass ditch diverts water from tributaries of Fraser River between headgate in sec.33, T.2 S., R.75 W., and Berthoud Pass, in Colorado River basin, to Hoop Creek (tributary to West Fork Clear Creek) in sec.10, T.3 S., R.75 W., in Platte River basin.

09022500 Moffat water tunnel diverts water from tributaries of Williams Fork (via August P. Gumlick and Vasquez tunnels, beginning in 1959) between headgates (in secs.20 and 29, T.3 S., R.76 W.) and west portal of August P. Gumlick tunnel (in sec.28, T.3 S., R.76 W.) and from the main stem and tributaries of Fraser River between headgates (in sec.8, T.2 S., R.76 W., and sec.24, T.1 S., R.75 W.) and west portal of Moffat tunnel (in sec.11, T.2 S., R.75 W.), in Colorado River basin, to South Boulder Creek, in sec.2, T.2 S., R.74 W., in Platte River basin. (See station 09036000 in Volume 2 for diversions by August P. Gumlick tunnel.)

09042000 Hoosier Pass tunnel diverts water from tributaries of Blue River in Colorado River basin to Montgomery Reservoir (Middle Fork South Platte River) in sec.14, T.8 S., R.78 W., in Platte River basin; this water is again diverted to South Catamount Creek (tributary to Catamount Creek) in SE¼ sec.14, T.13 S., R.69 W., in the Arkansas River basin. Collection conduits extending from the right bank of Crystal Creek (tributary to Spruce Creek) in sec.14, T.7 S., R.78 W., right bank of Spruce Creek in sec.23, T.7 S., R.78 W., right bank of McCullough Gulch in sec.26, T.7 S., R.78 W., right bank of Monte Cristo Creek in SW¼NE¼ sec.2, T.8 S., R.78 W., left bank of Bemrose Creek in SW¼SW¼ sec.6, T.8 S., R.77 W., and intercepting intermediate tributaries, transport diversions to north portal of the tunnel.

09046000 Boreas Pass ditch diverts water from tributaries of Blue River between headgate in sec.26, T.7 S., R.77 W., and Boreas Pass, in Colorado River basin, to Tarryall Creek in sec.26, T.7 S., R.77 W., in Platte River basin.
REVISIONS (WATER YEARS).--WSP 1733: 1958.

09047300 Vidler tunnel diverts water from tributaries of Peru Creek (tributary to Snake River) in sec.9, T.5 S., R.75 W., in Blue River basin, to Leavenworth Creek (tributary to South Clear Creek) in sec.10, T.5 S., R.75 W., in Platte River basin.

09050590 Harold D. Roberts tunnel diverts water from Dillon Reservoir (Blue River) in sec.18, T.5 S., R.77 W., in Blue River basin, to North Fork South Platte River (tributary to South Platte River) in SW¼SW¼ sec.4, T.7 S., R.74 W., in Platte River basin. Figures include a small amount of ground-water inflow between Dillon Reservoir and east portal of tunnel.

09061500 Columbine ditch diverts water from tributaries of Eagle River in sec.5, T.8 S., R.79 W., in Colorado River basin to Chalk Creek (tributary to East Fork Arkansas River) in NW¼ sec.9, T.8 S., R.79 W., in Arkansas River basin.

09062000 Ewing ditch diverts water from Piney Creek in sec.11, T.8 S., R.80 W., in Eagle River basin, to Thayer Gulch (tributary to Tennessee Creek) in sec.11, T.8 S., R.80 W., in Arkansas River basin.

TRANSMOUNTAIN DIVERSIONS FROM COLORADO RIVER BASIN IN COLORADO--Continued

09062500 Wurtz ditch diverts water from tributaries of Eagle River between headgate in sec.32, T.7 S., R.80 W., and Tennessee Pass, in Colorado River basin, to West Tennessee Creek (tributary to Tennessee Creek) in sec.17, T.8 S., R.80 W., in Arkansas River basin.

09063700 Homestake tunnel diverts water from Homestake Lake (Middle Fork Homestake Creek), in sec.17, T.8 S., R.81 W., in Eagle River basin, to Lake Fork in sec.9, T.9 S., R.81 W., in Arkansas River basin. Water is imported to Homestake Lake from tributaries of Homestake Creek by collection conduits that extend from right bank of French Creek in sec.29, T.7 S., R.81 W., and left bank of East Fork Homestake Creek in sec.9, T.8 S., R.81 W., and intercept intermediate tributaries.

09073000 Twin Lakes tunnel diverts water from tributaries of Roaring Fork River between headgates (in sec.21, T.11 S., R.83 W., and sec.2, T.11 S., R.83 W.), and west portal of Twin Lakes tunnel (in sec.24, T.11 S., R.83 W), in Colorado River basin, to North Fork Lake Creek in sec.22, T.11 S., R.82 W., in Arkansas River basin.

09077160 Charles H. Boustead Tunnel diverts water from the main stem and tributaries of Fryingpan River (tributary to Roaring Fork River), in Colorado River basin, to Lake Fork in sec.10, T.9 S., R.81 W., in Arkansas River basin. Water is transported to west portal of tunnel (at lat 39°14'44", long 106°31'47"), by a series of collection conduits extending between headgates on right bank of Sawyer Creek at lat 39°15'58", long 106°38'19", and right bank of Fryingpan River at lat 39°14'40", long 106°31'49", and intercepting intermediate tributaries.

09077500 Busk-Ivanhoe tunnel diverts water from Ivanhoe Lake (Ivanhoe Creek), tributary to Fryingpan River in sec.13, T.9 S., R.82 W., in Roaring Fork River basin, to Busk Creek (tributary to Lake Fork) in sec.20, T.9 S., R.81 W., in Arkansas River basin.

09115000 Larkspur ditch diverts water from tributaries of Tomichi Creek between headgates (in sec.11, T.48 N., R.6 E., and sec.1, T.47 N., R.6 E.), and Marshall Pass, in Gunnison River basin, to Poncha Creek (tributary to South Arkansas River) in SE¼ sec.24, T.48 N., R.6 E., in Arkansas River basin.

09118200 Tarbell ditch diverts water from Lake Fork Cochetopa Creek (tributary to Cocnetopa Creek), in NW¼ sec.18, T.43 N., R.2 E., in Gunnison River basin, to Lake Fork Saguache Creek (tributary to Middle Fork Saguache Creek) in NE¼ sec.18, T.43 N., R.2 E., in Rio Grande basin. All records available prior to October 1960 published in WSP 1733.
REVISIONS (WATER YEARS).--WSP 1733: 1949-51.

09121000 Tabor ditch diverts water from tributaries of Cebolla Creek in secs.29 and 36, T.43 N., R.3 W., in Gunnison River basin, to Big Spring Creek (tributary to North Clear Creek) in sec.35, T.43 N., R.3 W., in Rio Grande basin.

09341000 Treasure Pass diversion ditch diverts water from tributaries of Wolf Creek between headgates (in sec.31, T.38 N., R.2 E., and sec.6, T.37 N., R.3 E.), and Wolf Creek Pass, in San Juan River basin, to tributary of South Fork Rio Grande in sec.31, T.38 N., R.2 E., in Rio Grande basin.

09347000 Don La Font ditches 1 and 2 divert water from tributaries of Piedra River between headgates in NW¼ sec.4, T.38 N., R.1 W., and SW¼ sec.33, T.39 N., R.1 W., and Piedra Pass, in San Juan River basin, to South River in sec.4, T.38 N., R.1 W., in Rio Grande basin.

09348000 Williams Creek-Squaw Pass ditch diverts water from Williams Creek (tributary to Piedra River) in sec.13, T.39 N., R.3 W., in San Juan River basin, to Squaw Creek in sec.10, T.39 N., R.3 W., in Rio Grande basin.

09351000 Pine River-Weminuche Pass ditch diverts water from North Fork Los Pinos River (tributary to Los Pinos River) in sec.4, T.39 N., R.4 W., in San Juan River basin, to Weminuche Creek in sec.33, T.40 N., R.4 W., in Rio Grande basin.

09351500 Weminuche Pass ditch diverts water from left bank of Rincon la Vaca Creek (tributary to Los Pinos River) in sec.5, T.39 N., R.4 W., in San Juan River basin, to Weminuche Creek in sec.33, T.40 N., R.4 W., in Rio Grande basin.

DIVERSIONS, IN ACRE-FEET, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

Diversion	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Water year
TO PLATTE RIVER BASIN													
09010000 Grand River ditch...	0	0	0	0	0	0	0	0	4,980	8,850	3,350	751	17,940
09012000 Eureka ditch........	0	0	0	0	0	0	0	0	0	14	34	12	60
09013000 Alva B. Adams tunnel	25,150	24,980	29,210	22,520	19,890	22,560	17,340	8,880	332	4,940	12,590	10,140	198,500
09021500 Berthoud Pass ditch.	0.4	0	0	0	0	0	0	0	0	241	123	8.6	373
09022500 Moffat water tunnel.	1,910	769	614	442	321	389	613	10,170	14,710	15,450	6,770	3,570	55,740
09046000 Boreas Pass ditch...	0	0	0	0	0	0	0	0	69	76	8.4	0	154
09047300 Vidler tunnel.......	0.8	0	0	0	0	0	0	0	0	278	235	114	627
09050590 Harold D. Roberts tunnel...........	19,340	9,970	6,410	6,380	5,720	4,860	0	0	0	5,400	7,410	8,370	73,850
Total......................	46,400	35,720	36,230	29,340	25,930	27,810	17,950	19,050	20,090	35,250	30,520	22,970	347,300
TO ARKANSAS RIVER BASIN													
09042000 Hoosier Pass tunnel.	0	0	0	0	0	0	0.4	1,050	3,940	1,660	1,510	1,760	9,910
09061500 Columbine ditch.....	0	0	0	0	0	0	0	182	1,350	424	59	19	2,040
09062000 Ewing ditch.........	0	0	0	0	0	0	0	162	955	322	99	53	1,590
09062500 Wurtz ditch.........	0	0	0	0	0	0	0	626	2,690	851	130	12	4,310
09063700 Homestake tunnel....	0	0	0	0	45	17,460	13,280	0	0	0	0	0	30,780
09073000 Twin Lakes tunnel...	413	284	213	177	157	155	264	8,320	27,300	6,150	3,190	436	47,060
09077160 Charles H. Boustead Tunnel............	0	0	0	0	0	0	0	6,870	29,430	16,510	1,210	0	54,020
09077500 Busk-Ivanhoe tunnel.	36	43	0	0	0	0	0	447	3,950	2,070	143	22	6,710
09115000 Larkspur ditch......	0	0	0	0	0	0	0	16	138	42	26	18	241
Total......................	449	327	213	177	202	17,620	13,540	17,670	69,750	28,030	6,370	2,320	156,700
TO RIO GRANDE BASIN													
09118200 Tarbell ditch.......	0	0	0	0	0	0	0	0	0	50.6	201	45	296
09121000 Tabor ditch.........	0	0	0	0	0	0	0	169	726	284	93	29	1,300
09341000 Treasure Pass diversion ditch........	0	0	0	0	0	0	0	0	100	290	2.4	0	392
09347000 Don La Font ditches Nos. 1 and 2......	0	0	0	0	0	0	0	0	0	157	39	0	196
09348000 Williams Creek-Squaw Pass ditch........	0	0	0	0	0	0	0	0	0	0	0	0	0
09351000 Pine River-Weminuche Pass ditch........	0	0	0	0	0	0	0	0	77	134	18	0	228
09351500 Weminuche Pass ditch	0	0	0	0	0	0	0	0	262	842	134	0	1,240
Total......................	0	0	0	0	0	0	0	169	1,160	1,760	487	74	3,650
Grand Total................	46,850	36,050	36,440	29,520	26,130	45,430	31,490	36,890	91,000	65,040	37,380	25,360	563,290

NOTE: Due to method of computing water year figures and rounding procedures, totals do not agree.

CREST-STAGE PARTIAL-RECORD STATIONS

The following table contains annual maximum discharges for crest-stage stations. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum discharge for each water year is given. Information on some lower floods may have been obtained, but is not published herein. The years given in the period of record represent water years for which the annual maximum has been determined.

ANNUAL MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS DURING WATER YEAR 1979

Station number	Station name	Location	Drainage area (mi²)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (ft³/s)
		DOLORES RIVER BASIN					
09168700	Disappointment Creek tributary near Slick Rock, CO	Lat 38°01'33", long 108°48'51", in SW¼SW¼ sec.36, T.44 N., R.18 W., San Miguel County, at twin culverts at State Highway 141, 5 mi (8 km) southeast of Slick Rock.	1.93	1970-79	1979	(a)	36
09169800	East Paradox Creek tributary near Bedrock, CO	Lat 38°16'53", long 108°48'21", in NE¼SW¼ sec.36, T.47 N., R.16 W., Montrose County, at culvert at State Highway 90, 5.5 mi (8.8 km) southeast of Bedrock.	3.96	1970-79	1979	(a)	26
09175800	Dead Horse Creek near Naturita, CO	Lat 38°02'37", long 108°34'36", in NE¼SE¼ sec.25, T.44 N., R.16 W., San Miguel County, at culvert at State Highway 141, 12.1 mi (19.5 km) south of Naturita.	5.33	1970-79	8-15-79	10.39	9.7
09179400	West Creek tributary near Gateway, CO	Lat 38°43'01", long 108°55'28", in NW¼SE¼ sec.29, T.15 S., R.103 W., Mesa County, on box culvert at State Highway 141, 3 mi (5 km) northeast of Gateway.	2.17	1973-79	5-28-79	11.75	126
09238500	Walton Creek near Steamboat Springs, CO	Lat 40°24'29", long 108°47'11", in SW¼NW¼ sec.11, T.5 N., R.85 W., Routt County, on left bank 0.4 mi downstream from Beaver Creek, and 6.0 mi southeast of Steamboat Springs.	42.4	1920-22, 1965-73 1978-		---	---
		GREEN RIVER BASIN					
09250900	Lay Creek tributary near Lay, CO	Lat 40°31'31", long 107°55'28", in NE¼SE¼ sec.27, T.7 N., R.94 W., Moffat County, on left bank at culvert under U.S. Highway 40, 0.2 mi (0.3 km) upstream from mouth, 2.5 mi (4.0 km) west of Lay, and 22 mi (35 km) west of Craig.	61.0	1977-79	1979	(a)	.2
09259750	Little Snake River tributary near Great Divide, CO	Lat 40°53'10", long 108°08'47", in SE¼NE¼ sec.30, T.11 N., R.95 W., Moffat County, on right bank at culvert on county road 21, 1.2 mi (1.9 km) upstream from mouth, and 15 mi (24 km) northwest of Great Divide.	3.5	1974-79	1979	(a)	3.7
09306315	Gillam Draw near Rangely, CO	Lat 40°05'31", long 108°44'45", in NE¼NE¼ sec.5, T.1 N., R.101 W., Rio Grande County, on right bank 20 ft (6 m) downstream from bridge on State Highway 64, 0.8 mi (1.3 km) upstream from mouth, and 3.0 mi (4.8 km) east of Rangely.	13.6	1974-79	9-26-79	11.43	84

Reproduced from best available copy.

ANNUAL MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS DURING WATER YEAR 1979--Continued

Station number	Station name	Location	Drainage area (mi²)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (ft³/s)
		GREEN RIVER BASIN--Continued					
09306390	West Twin Wash near Dinosaur, COc	Lat 40°14'34", long 108°57'16", in NE¼SE¼ sec.9, T.3 N., R.103 W., Moffat County, on left bank at culvert on U.S. Highway 40, 1.5 mi (2.4 km) upstream from mouth, and 2.9 mi (4.7 km) east of Dinosaur.	4.12	1974-79	1979	(a)	30
09361400	Junction Creek near Durango, CO	Lat 37°20'04", long 107°54'35", in sec.36, T.36 N., R.10W., La Plata County, on left bank 4.5 mi upstream from mouth and 4.5 mi northwest of Durango.	26.3	1959-65 1979-		---	---
		SAN JUAN RIVER BASIN					
09371300	McElmo Creek tributary near Cortez, CO	Lat 37°20'51", long 108°28'56", in NE¼SE¼ sec.27, T.36 N., R.15 W., Montezuma County, at bridge on U.S. Highway 160, 5.8 mi (9.3 km) east of Cortez.	4.43	1971-79	1979	(a)	8

a Peak stage did not reach bottom of gage.
b Approximately.
c Previously published in error as station number 09306400.

DISCHARGE MEASUREMENTS MADE AT MISCELLANEOUS SITES DURING THE 1979 WATER YEAR

Stream or station number	Tributary to	Location	Drainage area (mi²)	Measured previously (water year)	Measurements Date	Measurements Discharge (ft³/s)
		GREEN RIVER BASIN				
Mad Creek	Yampa River	Lat 40°33'58", long 106°53'19", in Routt County, at county road crossing, 300 ft upstream from mouth, and 6 mi northwest of Steamboat Springs.	39.9	---	6-12-79	409
Trout Creek	Yampa River	Lat 40°18'44", long 107°00'34", in Routt County, 50 ft upstream from county road crossing and confluence with Little Trout Creek, and 4 mi northwest of Oak Creek.	32.1	---	6-13-79 6-14-79	163 190
Yampa River	Green River	Lat 40°27'41", long 108°25'30", in Moffat County, 1.2 mi upstream from confluence with Little Snake River and 6.9 mi upstream from Deerlodge Park campground.	[a]4,000	---	6-12-79	5,010
do	do	Lat 40°27'30", long 108°30'44", in Moffat County, 5.1 mi downstream from mouth of Little Snake River, and 0.6 mi upstream from Deerlodge Park campground.	[a]4,000	---	1-22-79	254
		SAN JUAN RIVER BASIN				
Piedra River (09349500)	San Juan River	Lat 37°13'20", long 107°20'32", in Archuleta County, upstream from U.S. Highway 160 bridge crossing at Piedra.	371	1911-12, 1938-73	5-31-79 6-7-79	2,920 3,173

[a] Approximately.

YAMPA RIVER INFLOW MEASUREMENTS

This series of discharge measurements and those to be made in the future, will form the basis for testing different point depth/velocity prediction methods.

Site no.	Stream	Tributary to	Location	Drainage area (mi²)	Period of record	Measurement		
						Date	Time	Discharge (ft³/s)
1	Elk River	Yampa River	Lat 40°41'26", long 106°55'08", in Routt County, 0.4 mi downstream from county bridge, and 1.4 mi downstream from Clark.	a225	1978-	8-15-78	1135	224
							1350	226
							1450	248
							1505	222
							1615	221
						9-16-78	1020	69.0
							1050	81.4
							1135	81.4
							1350	92.6
							1500	90.3
						7-26-79	1035	339
							1100	360
							1315	304
							1415	341
							1500	318
2	do	do	Lat 40°30'56", long 106°56'57", in Routt County, upstream of county bridge, and 2.9 mi upstream from State Highway 40 bridge over Elk River.	a400	1978-	8-06-78	1015	286
							1115	326
							1310	310
							1405	325
							1430	379
							1515	321
						9-17-78	0935	53.5
							0945	54.4
							1100	57.2
							1155	56.7
							1355	61.2
							1410	59.3
						7-25-79	0935	539
							1015	560
							1145	493
							1200	526
							1530	532
							1535	547
3	Yampa River	Green River	Lat 40°24'37", long 107°42'36", in Moffat County, 6.5 mi downstream from Williams Fork River.	a2,730	1978-	8-03-78	1325	890
							1450	850
							1640	786
							1835	818
						9-15-78	0945	183
							1050	170
							1220	180
							1345	184
							1450	172
						5-04-79	1020	4,910
							1300	4,740
							1355	5,610
							1600	5,720
							1830	5,800
4	do	do	Lat 40°28'14", long 107°57'26", in Moffat County, 3.5 mi downstream from county bridge, and at Juniper Springs.	a3,300	1978-	8-04-78	1155	826
							1245	760
							1420	762
							1540	838
							1655	813
						9-13-78	0930	182
							0940	181
							1105	189
							1115	184
							1350	198
						4-30-79	1055	3,970
							1200	4,060
							1520	4,070
							1530	4,400
							1820	4,470

Site no.	Stream	Tributary to	Location	Drainage area (mi²)	Period of record	Measurement		
						Date	Time	Discharge (ft³/s)
5	Yampa River	Green River	Lat 40°27'25", long 108°23'17", in Moffat County, 1.5 mi upstream from county bridge, and 3.0 mi upstream from confluence of Little Snake River.	a3,960	1978-	8-02-78	1110	963
							1340	998
							1600	1,110
							1740	1,070
							1900	854
							1950	810
						9-14-78	1035	168
							1150	176
							1310	318
							1450	260
							1630	184
							1745	231
						9-18-78	1140	170
							1145	191
						5-01-79	1015	4,360
							1140	4,910
							1405	4,610
							1655	5,120
							1810	4,240
							1910	4,750
6	do	do	Lat 40°29'33", long 108°52'38", in Moffat County, 1.5 mi upstream from Mantle Ranch in Dinosaur National Monument.	a8,100	1979-	7-12-79	1130	2,390
							1355	2,360
							1530	2,350
							1710	2,390
						8-07-79	1300	462
							1210	426
							1520	480
							1815	401
7	Yampa River	Green River	Lat 40°31'10", long 108°57'22", in Moffat County, 2.2 mi upstream from confluence with Green River, at Box Elder Campground, Dinosaur National Monument.	a8,250	1979-	7-11-79	0850	2,780
							1100	2,980
							1320	2,690
							1400	3,100
							1700	2,500
						8-09-79	0940	422
							1155	535
							1330	438
							1615	452
							1625	419

a Approximately.

09165000 - DOLORES RIVER BELOW RICO, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT		
02...	560	5.0
NOV		
03...	520	6.0
29...	550	.0
DEC		
05...	650	.0
JAN		
09...	640	.0
FEB		
06...	660	.0
MAR		
12...	450	1.0

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
APR		
04...	380	2.0
MAY		
07...	240	5.0
29...	160	7.0
JUN		
25...	140	8.0
AUG		
02...	240	14.0
SEP		
06...	400	8.0

09166500 - DOLORES RIVER AT DOLORES, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT		
05...	640	6.0
NOV		
03...	450	9.0
29...	550	.0
DEC		
05...	700	.0
JAN		
09...	690	.0
FEB		
06...	480	.0
MAR		
13...	490	1.0

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
APR		
04...	430	5.0
MAY		
07...	120	6.0
29...	210	5.0
JUN		
25...	150	8.0
AUG		
02...	260	19.0
SEP		
06...	300	14.0

09168100 - DISAPPOINTMENT CREEK NEAR DOVE CREEK, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
FEB		
05...	3800	.0
MAR		
13...	4000	1.0
APR		
03...	4900	.0
MAY		
07...	1200	11.0

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
JUN		
01...	830	10.0
28...	860	12.0
AUG		
01...	3200	13.0
SEP		
06...	4800	13.0

09169500 - DOLORES RIVER AT BEDROCK, CO.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	TEMPER-ATURE (DEG C)
OCT		
03...	750	9.0
NOV		
02...	750	15.0
27...	2000	6.0
MAR		
12...	1400	7.0
APR		
03...	1040	8.0
MAY		
08...	250	11.0
31...	240	10.0
JUN		
27...	265	18.0
JUL		
31...	1950	24.0
SEP		
05...	2050	16.0

09171100 - DOLORES RIVER NEAR BEDROCK, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	TEMPER-ATURE (DEG C)
OCT		
03...	40000	10.0
NOV		
02...	27000	17.0
27...	7200	6.0
DEC		
06...	27000	1.0
JAN		
08...	8000	.0
FEB		
05...	8000	.0
MAR		
12...	5000	7.0
APR		
03...	2900	12.0
MAY		
08...	300	11.0
31...	260	12.0
JUN		
27...	445	19.0
JUL		
31...	20000	26.0
SEP		
05...	50000	17.5

09172500 - SAN MIGUEL RIVER NEAR PLACERVILLE, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	TEMPER-ATURE (DEG C)
OCT		
02...	440	11.0
NOV		
03...	420	6.0
28...	480	.0
DEC		
05...	420	1.0
JAN		
09...	360	.0
FEB		
06...	590	.0
MAR		
12...	380	3.0
APR		
04...	425	2.0
MAY		
07...	330	10.0
29...	170	8.0
JUN		
25...	205	12.0
AUG		
02...	260	9.0
SEP		
04...	385	13.0

09172600 - SALTADO CREEK NEAR NORWOOD, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)	DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)
MAY			AUG		
30...	100	3.0	01...	220	21.0
JUN					
26...	150	8.0			

09172700 - GURLEY DITCH NEAR NORWOOD, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)	DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)
OCT			AUG		
02...	240	14.0	01...	140	17.0
MAY			SEP		
30...	110	4.0	04...	170	17.0
JUN					
26...	115	6.0			

09172800 - WEST BEAVER CREEK NEAR NORWOOD, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)	DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)
MAY			AUG		
30...	80	3.0	01...	115	10.0
JUN					
26...	75	7.0			

09174700 - WEST NATURITA C AT UPPER STA, NEAR NORWOOD, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)	DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)
MAY			AUG		
09...	180	2.0	01...	225	11.0
30...	110	3.0			
JUN					
26...	135	8.0			

09175200 - LILYLANDS CANAL NEAR NORWOOD, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)
MAY		
09...	385	5.0
30...	180	12.0
JUN		
26...	240	18.0
AUG		
01...	270	17.5

09175400 - MAVERICK DRAW NEAR NORWOOD, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)
OCT		
04...	1650	9.0
NOV		
02...	1600	9.0
DEC		
06...	1700	5.0
JAN		
09...	1800	1.0
MAR		
12...	1600	7.0
APR		
04...	930	3.0
MAY		
07...	1750	12.0
29...	--	14.0
JUN		
25...	1090	20.0
AUG		
01...	930	22.0
SEP		
04...	1450	20.0

09239500 - YAMPA RIVER AT STEAMBOAT SPRINGS, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)
OCT		
23...	340	7.0
JUL		
24...	220	17.5
AUG		
23...	280	19.5
SEP		
24...	300	18.0

09241000 - ELK RIVER AT CLARK, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)	DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)
MAY 14...	100	3.5	AUG 23...	70	10.5

09245000 - ELKHEAD CREEK NEAR ELKHEAD, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)	DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)
MAY 14...	190	7.0	AUG 16...	200	17.0

09249200 - SOUTH FORK OF WILLIAMS FORK NEAR PAGODA, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)	DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)
JUL 25...	280	20.0	AUG 17...	290	20.0

09250000 - MILK CREEK NEAR THORNBURGH, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)	DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)
MAY 15...	360	5.0	AUG 17...	975	19.5
JUL 25...	1000	24.5			

09253000 - LITTLE SNAKE RIVER NEAR SLATER, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)
OCT		
04...	190	6.5
25...	--	5.5
NOV		
15...	200	.5
27...	--	.0
DEC		
18...	190	.0
21...	--	.0
JAN		
18...	--	.0
FEB		
16...	--	.0
MAR		
15...	190	.0
28...	--	.5
APR		
26...	130	2.5
26...	--	3.0
MAY		
15...	105	4.0
23...	--	9.5
JUN		
26...	--	14.0
JUL		
19...	--	20.5
AUG		
16...	--	16.0
22...	240	18.0
SEP		
26...	--	13.5

09255000 - SLATER FORK NEAR SLATER, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)
OCT		
04...	240	8.5
NOV		
06...	230	3.0
JAN		
09...	200	.0
MAR		
15...	230	.0
APR		
26...	180	6.5
AUG		
22...	240	16.0

09258000 - WILLOW CREEK NEAR DIXON, WY.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)
MAR		
15...	250	.0
APR		
26...	200	11.5
MAY		
15...	180	13.5
AUG		
22...	120	13.0

09302450 - LOST CREEK NEAR BUFORD, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)	DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)
NOV			MAY		
14...	440	1.0	02...	195	8.0
DEC			JUN		
17...	393	.0	11...	175	7.0
JAN			AUG		
04...	363	.0	01...	440	13.5
FEB			SEP		
06...	365	.0	12...	430	12.5
MAR					
20...	--	.0			

09302500 - MARVINE CREEK NEAR BUFORD, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)	DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)
NOV			MAY		
13...	300	3.0	04...	285	9.0
DEC			JUN		
13...	320	.0	11...	225	7.5
JAN			AUG		
11...	308	.0	01...	265	11.5
FEB			SEP		
06...	304	.0	12...	430	12.5

09303000 - NORTH FORK WHITE RIVER AT BUFORD, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)	DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)
NOV			MAY		
13...	335	.0	24...	165	5.5
DEC			AUG		
12...	323	.0	01...	250	16.0
13...	325	--	SEP		
JAN			12...	310	9.0
10...	330	.0			
FEB					
07...	327	.0			

09303300 - SOUTH FORK WHITE RIVER AT BUDGES RESORT, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)	DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)
OCT			SEP		
15...	165	7.5	13...	160	9.0
AUG					
08...	170	12.5			

09303320 - WAGONWHEEL CREEK AT BUDGES RESORT, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)
AUG		
08...	285	12.0

09303400 - SOUTH FORK WHITE RIVER NEAR BUDGES RESORT, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)	DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)
OCT			FEB		
03...	218	7.5	14...	190	.0
NOV			AUG		
09...	200	2.5	31...	205	11.0
29...	220	.0			
JAN					
05...	218	.0			

09303500 - SOUTH FORK WHITE RIVER NEAR BUFORD, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)	DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)
NOV			FEB		
09...	253	2.0	13...	215	.0
29...	265	.0			
JAN					
03...	218	.0			

09304000 - SOUTH FORK WHITE RIVER AT BUFORD, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)
DEC 13...	250

09304150 - MILLER CREEK NEAR MEEKER, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)
NOV 14...	1020	4.5
DEC 13...	1070	3.5
JAN 11...	900	--
FEB 05...	950	--
MAY 04...	1100	10.0
AUG 06...	925	17.5

09304500 - WHITE RIVER NEAR MEEKER, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)
NOV 07...	610	4.0
DEC 11...	355	.0
JAN 19...	590	.0
FEB 01...	620	.0
FEB 01...	535	.0
APR 26...	155	10.5
AUG 06...	675	17.0

09339900 - EF SAN JUAN R AB SAND CREEK, NR PAGOSA SPGS, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)
OCT 02...	100	8.0
NOV 06...	170	8.0
MAY 29...	120	6.0
JUN 14...	130	7.0
JUL 02...	130	10.0
AUG 03...	120	12.0
29...	140	12.0

09340000 - EAST FORK SAN JUAN RIVER NR PAGOSA SPRINGS, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)	DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)
OCT			MAY		
02...	110	9.0	29...	160	7.0
NOV			JUN		
06...	140	6.5	14...	160	7.0
30...	150	1.0	JUL		
JAN			02...	170	12.0
02...	280	1.0	AUG		
FEB			03...	110	13.5
05...	--	.0	29...	130	13.0

09342500 - SAN JUAN RIVER AT PAGOSA SPRINGS, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)	DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)
OCT			APR		
03...	120	11.0	04...	350	9.0
NOV			MAY		
07...	175	7.0	03...	100	9.0
DEC			30...	110	5.0
01...	300	2.0	JUN		
JAN			15...	110	7.0
09...	140	.0	JUL		
22...	--	1.0	03...	120	10.0
FEB			AUG		
06...	180	.0	03...	80	15.0
MAR			30...	120	13.0
07...	200	5.0			

09346000 - NAVAJO RIVER AT EDITH, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)	DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)
OCT			MAY		
03...	250	4.0	03...	240	8.0
NOV			29...	230	10.0
07...	260	5.0	JUN		
30...	240	1.0	14...	240	11.0
JAN			JUL		
22...	--	.0	03...	250	11.0
FEB			AUG		
06...	260	.0	03...	240	24.0
MAR			29...	240	20.0
07...	260	.0			

09347205 - MIDDLE FORK PIEDRA RIVER NEAR DYKE, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	TEMPER-ATURE (DEG C)
OCT		
03...	70	6.0
NOV		
07...	75	3.0
DEC		
01...	70	.0
MAY		
29...	80	6.0
JUN		
14...	70	7.0
JUL		
02...	70	10.0
AUG		
03...	70	11.0
29...	70	8.0

09357500 - ANIMAS RIVER AT HOWARDSVILLE, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	TEMPER-ATURE (DEG C)
OCT		
02...	--	13.5
16...	--	1.0
30...	--	8.5
NOV		
29...	--	4.0
DEC		
12...	--	1.5
27...	--	.0
JAN		
08...	--	.0
22...	--	1.0
FEB		
14...	--	1.5
FEB		
27...	--	2.5
MAR		
30...	--	6.0
APR		
13...	--	9.0
26...	--	6.0
MAY		
15...	--	4.0
29...	--	7.0
JUN		
13...	--	9.5

09361000 - HERMOSA CREEK NEAR HERMOSA, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	TEMPER-ATURE (DEG C)
NOV		
03...	650	8.0
DEC		
12...	720	1.0
JAN		
11...	1200	.0
FEB		
08...	720	.0
MAR		
01...	520	2.0
APR		
06...	515	4.0
MAY		
04...	290	6.0
31...	200	8.0
JUN		
08...	220	7.0
29...	260	7.0
AUG		
27...	650	11.0

09361500 - ANIMAS RIVER AT DURANGO, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)
OCT		
23...	700	10.0
NOV		
20...	680	5.0
DEC		
20...	770	2.0
JAN		
24...	610	1.0
FEB		
22...	415	3.0
MAR		
22...	630	8.0
APR		
23...	310	8.0
MAY		
24...	280	7.0
30...	290	8.0
JUN		
29...	160	8.0
AUG		
24...	360	14.5
SEP		
21...	690	12.5

09363050 - FLORIDA R BL FLOR FARMERS DITCH, NR DURANGO, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)
NOV		
03...	270	10.0
DEC		
12...	310	.0
JAN		
10...	400	.0
FEB		
08...	440	.0
MAR		
01...	400	3.0
APR		
06...	325	6.0
12...	300	5.0
MAY		
04...	270	9.0
JUL		
03...	165	10.0
25...	60	16.0
AUG		
27...	220	17.0

09363100 - SALT CREEK NEAR OXFORD, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)
NOV		
03...	290	8.0
DEC		
12...	1300	.0
JAN		
10...	1000	.0
MAR		
01...	1460	1.0
28...	280	3.0
APR		
12...	520	7.0
MAY		
16...	1050	11.0
31...	120	12.0
JUL		
03...	300	11.0
25...	175	19.5
AUG		
27...	180	20.0

09363200 - FLORIDA RIVER AT BONDAD, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)
NOV		
03...	300	9.0
DEC		
12...	1000	.0
JAN		
10...	1200	.0
FEB		
08...	660	.0
MAR		
01...	690	1.0
29...	310	2.0

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)
APR		
12...	420	7.0
26...	320	9.5
MAY		
31...	300	--
JUL		
03...	350	11.0
25...	380	18.5
AUG		
27...	360	21.0

09365500 - LA PLATA RIVER AT HESPERUS, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)
OCT		
02...	--	12.0
16...	--	9.0
NOV		
03...	--	10.0
20...	--	6.5
DEC		
05...	--	2.0
20...	--	1.0
JAN		
03...	--	.0
18...	--	.0

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)
MAR		
22...	--	.0
APR		
02...	--	.5
MAY		
01...	--	8.0
14...	--	11.0
30...	--	7.5
JUN		
07...	--	4.0
14...	--	8.5
19...	--	4.0

09371000 - MANCOS RIVER NEAR TOWAOC, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)
OCT		
30...	2100	9.0
DEC		
04...	2500	.0
JAN		
04...	2000	.0
FEB		
07...	2200	.0
21...	1150	3.0
MAR		
27...	1410	8.5
APR		
13...	1350	9.0

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)
MAY		
14...	600	12.0
JUN		
18...	520	14.0
JUL		
19...	1100	22.0
AUG		
07...	1410	28.0
SEP		
10...	1900	19.5

09371420 - MCELMO CREEK ABOVE ALKALI CANYON, NR CORTEZ, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)
OCT		
17...	3500	7.0
NOV		
16...	2400	3.0
FEB		
07...	6000	.0
23...	2250	2.0
MAR		
26...	2650	8.5
MAY		
07...	2900	11.0
JUN		
07...	2200	17.0
JUL		
09...	2050	19.0
AUG		
07...	2200	19.5
SEP		
10...	2800	18.0

09371495 - MUD CREEK NEAR CORTEZ, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)
OCT		
30...	5400	8.0
DEC		
04...	6000	.0
JAN		
03...	6000	1.0
FEB		
07...	7000	.0
23...	2600	3.0
MAR		
26...	4100	10.0
MAY		
07...	4000	12.0
JUN		
07...	2800	17.0
JUL		
09...	2800	24.0
AUG		
07...	2700	20.0
SEP		
10...	3000	17.0

09371700 - MCELMO CREEK BELOW CORTEZ, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)
OCT		
31...	3300	12.0
DEC		
04...	3200	.0
JAN		
03...	3900	--
FEB		
21...	2000	3.0
MAR		
26...	2400	8.0
30...	4000	.0
APR		
25...	3500	14.0
MAY		
22...	3100	18.0
JUN		
28...	1850	19.0
AUG		
07...	1700	24.0
SEP		
10...	2600	23.0

LA PLATA COUNTY

370122107522701 NB 32- 9-18BBB. B. Cogburn. Drilled stock water-table well in Naciemento Formation. Diameter, 6 in (0.2 m). Depth, 138 ft (42.1 m). MP, 0.3 ft (0.1 m) above lsd. Altitude of land surface, 5,980 ft (1,822.7 m). Records available: 1973-79.

Highest water level, 19.31 ft (5.9 m) below lsd, Aug. 26, 1976; lowest water level, 27.3 ft (8.3 m) below lsd, Apr. 30, 1974.

Aug. 30, 1979 19.31 ft

MOFFAT COUNTY

403040107420801 SB 7-92-34DBD. J. Herod. Drilled domestic water-table well in Browns Park Formation. Diameter, 5 in (0.1 m). Depth, 190 ft (57.9 m). MP, 4.0 ft (1.2 m) below lsd. Altitude of land surface, 6,545 ft (1,994.9 m). Records available: 1974-79.

Highest water level, 70.3 ft (21.4 m) below lsd, Feb. 2, 1976; lowest water level, 72.9 ft (22.2 m) below lsd, Nov. 7, 1974.

1979 No measurement

MONTEZUMA COUNTY

370414108583901 NB33-20-25CDC. Ute Indian Tribe. Drilled stock water-table well in Dakota Sandstone. Diameter, 5 in (0.1 m). Depth, 250 ft (76.2 m). MP, 2.0 ft (0.6 m) above lsd. Altitude of land surface, 4,900 ft (1,493.5 m). Records available: 1973-79.

Highest water level, +1.59 ft (+0.48 m) below lsd, Sept. 30, 1975; lowest water level, 50.9 ft (15.5 m) below lsd, Aug. 30, 1976.

Aug. 20, 1979 +1.59 ft

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